

# Level II and Level III Processing Using Secure Acceptance

Supplement to *Secure Acceptance Hosted Checkout*  
and *Secure Acceptance Checkout API*

October 2018

**CyberSource<sup>®</sup>**  
the power of payment

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# Recent Revisions to This Document

Release	Changes
October 2018	<p>CyberSource through VisaNet:</p> <ul style="list-style-type: none"> <li>■ Added Level III data. See <a href="#">Chapter 4, "CyberSource through VisaNet: Level II and Level III,"</a> on page 27.</li> <li>■ Updated the description for the <b>merchant_vat_registration_number</b> and <b>purchaser_vat_registration_number</b> fields. See <a href="#">"Order-Level Fields,"</a> page 28.</li> </ul>
September 2018	<p>CyberSource through VisaNet: updated the list of supported acquirers. See <a href="#">"Supported Acquirers,"</a> page 27.</p>
July 2018	<p>Changed the following product names:</p> <ul style="list-style-type: none"> <li>■ <i>Secure Acceptance Web/Mobile</i> to <i>Secure Acceptance Hosted Checkout</i>.</li> <li>■ <i>Secure Acceptance Silent Order POST</i> to <i>Secure Acceptance Checkout API</i>.</li> </ul>
June 2018	<p>GPN: updated descriptions for the following fields, which are listed in <a href="#">Chapter 9, "GPN: Level II and Level III,"</a> on page 64:</p> <ul style="list-style-type: none"> <li>■ discount_amount</li> <li>■ item_#_commodity_code</li> <li>■ item_#_discount_amount</li> <li>■ summary_commodity_code</li> </ul> <p>Lite: changed processor name to <i>Worldpay VAP</i>.</p>
February 2017	<p>CyberSource through VisaNet: updated the section <a href="#">"Supported Acquirers,"</a> page 27.</p>

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Release	Changes
September 2016	<p>All processors that support Level III transactions: updated description for field to specify that the value cannot be zero (0) for a Level III transaction.</p> <p>All processors: updated description for field to specify when the field is required.</p> <p>FDC Compass: updated requirements for <b>item_#_commodity_code</b>. See <a href="#">"Item-Level Fields," page 42</a>.</p> <p>GPN: updated Level III requirements for the following item-level fields: <b>item_#_commodity_code</b>, <b>item_#_discount_amount</b>, <b>item_#_discount_rate</b>, <b>item_#_product_code</b>, <b>item_#_quantity</b>, <b>item_#_unit_of_measure</b>, <b>item_#_unit_price</b>. See <a href="#">"Item-Level Fields," page 68</a>.</p> <p>OmniPay Direct: added a chapter for this processor. See <a href="#">Chapter 10, "OmniPay Direct: Level II and Level III,"</a> on page 71.</p>

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# About This Guide

## Audience and Purpose

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This guide is written for application developers who want to integrate credit card processing with Level II or Level III data into Secure Acceptance Hosted Checkout or Secure Acceptance Checkout API.

Implementing Secure Acceptance Hosted Checkout or Secure Acceptance Checkout API requires minimal scripting skills. You must create a security script and modify your HTML form to invoke Secure Acceptance. You will also use the Business Center to review and manage orders.

## Conventions

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The following special statements are used in this document:



**Note**

A *Note* contains helpful suggestions or references to material not contained in this document.



**Important**

An *Important* statement contains information essential to successfully completing a task or learning a concept.

The following text conventions are used in this document:

Convention	Meaning
<b>bold</b>	<ul style="list-style-type: none"> <li>Field and service names in text; for example: Include the <b>amount</b> field.</li> </ul>
screen text	<ul style="list-style-type: none"> <li>Text that you enter in an API environment; for example: Set the <b>tax_indicator</b> field to Y.</li> </ul>



## Related Documentation

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- *Secure Acceptance Checkout API Integration Guide* ([PDF](#) | [HTML](#))—describes how to create a Secure Acceptance profile for processing transactions.
- *Secure Acceptance Hosted Checkout Integration Guide* ([PDF](#) | [HTML](#))—describes how to create a Secure Acceptance profile and integrate seamlessly with Secure Acceptance Hosted Checkout for processing transactions.
- *Credit Card Services Using the Simple Order API* ([PDF](#) | [HTML](#))—describes how to integrate CyberSource payment processing services into your business using the Simple Order API.
- *Credit Card Services Using the SCMP API* ([PDF](#) | [HTML](#))—describes how to integrate CyberSource payment processing services into your business using the SCMP API.
- *Level II and Level III Processing Using the SCMP API* ([PDF](#) | [HTML](#))—describes how to integrate credit card processing with Level II or Level III data.
- *Level II and Level III Processing Using the Simple Order API* ([PDF](#) | [HTML](#))—describes how to integrate credit card processing with Level II or Level III data.

Refer to the Support Center for complete CyberSource technical documentation:

[http://www.cybersource.com/support\\_center/support\\_documentation](http://www.cybersource.com/support_center/support_documentation)

## Customer Support

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For support information about any CyberSource service, visit the Support Center:

<http://www.cybersource.com/support>

# Introduction to Level II and Level III Processing

This addendum to the [Secure Acceptance Checkout API Integration Guide](#) and the [Secure Acceptance Hosted Checkout Integration Guide](#) describes:

- Level II processing for American Express, Visa, and MasterCard
- Level III processing for Visa and MasterCard

After this introductory chapter, there is a chapter for each processor that supports Level II or Level III.



**Important**

This CyberSource document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

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## Prerequisites

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**Prerequisites for Level II Processing:** to activate Level II processing for American Express, contact American Express and CyberSource Customer Support.

**Prerequisites for Level III Processing:** check with your processor to determine whether you need to add Level III processing to your contract or account setup.

When you are ready to go live with Level III processing, contact CyberSource Customer Support to have your account configured to process Level III data. If your account is not enabled, and you try to send live Level III transactions, you will receive an error for invalid data.

## Supported Processors and Card Types

**Table 1 Supported Processors and Card Types**

<b>Processor</b>	<b>Level II Card Types Supported</b>	<b>Level III Card Types Supported</b>
American Express Direct	American Express	—
Chase Paymentech Solutions	Visa MasterCard American Express	Visa MasterCard
CyberSource through VisaNet	Visa MasterCard American Express	Visa MasterCard
FDC Compass	Visa MasterCard American Express	Visa MasterCard
FDC Nashville Global	Visa MasterCard American Express	Visa MasterCard
FDMS Nashville	Visa MasterCard	—
FDMS South	Visa MasterCard	—
GPN	Visa MasterCard	Visa MasterCard
OmniPay Direct	Visa MasterCard	Visa MasterCard
RBS WorldPay Atlanta	Visa MasterCard	Visa MasterCard
TSYS Acquiring Solutions	Visa MasterCard	Visa MasterCard
Worldpay VAP	Visa	Visa
Worldpay VAP was previously called <i>Little</i> .	MasterCard American Express	MasterCard

## About Level II and Level III Data

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Level II cards, which are also called *Type II cards*, provide customers with additional information on their credit card statements about their purchases. Level II cards enable customers to easily track the amount of sales tax they pay and to reconcile transactions with a unique customer code. There are two categories of Level II cards:

- Business/corporate cards are given by businesses to employees for business-related expenses such as travel and entertainment or for corporate supplies and services.
- Purchase/procurement cards are used by businesses for expenses such as supplies and services. These cards are often used as replacements for purchase orders.

Level III data can be provided for purchase cards, which are special credit cards that employees use to make purchases for their company. You provide additional detailed information—the Level III data—about the purchase card order during the settlement process. The Level III data is forwarded to the company that made the purchase, and it enables the company to manage its purchasing activities.



**Important**

CyberSource recommends submitting level II data for only purchase/procurement cards and level III data for only business/corporate cards. Submitting level II and level III data for all card types can result in errors from your processor.

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## CyberSource Level II and Level III Data Processing

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CyberSource does not store the Level II and Level III data. Instead, it functions as a pass-through service for the data. If you request multiple partial captures for a particular order, you must supply the Level II and Level III data in each request. CyberSource enforces only the minimal level of field validation to avoid interfering with the business policies between you and any company that purchases your services.



**Note**

CyberSource temporarily disables your account's Level III processing capability and contacts you if your Level III transactions produce batching errors when the information is sent to the processor. Your request is not rejected, but you receive a field in the reply indicating that the Level III information in the request has been ignored and not sent to the processor.

The reply field is **level\_3\_indicator**.

The possible values for the reply field are:

- Y: the Level III data was included in the request to the processor.
  - N: the Level III data was not included in the request to the processor.
-

## Requesting a Sale with Level II and Level III Data

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**Important**

If you omit required Level II fields from a request, the transaction does not result in an error. Instead, it is processed as a regular non-Level II transaction. However, your processor could charge you penalties or increase your fees. Contact your processor to ensure you understand your processor's specific requirements for Level II transactions.

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Level II and Level III data is required only for a capture. The transaction type sale is a bundled authorization and capture.

### To include Level II data in a sale request:

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**Step 1** Depending on the transaction you are processing, set the **transaction\_type** field to one of the following:

- sale
- sale,create\_payment\_token
- sale,update\_payment\_token

**Step 2** Include the following information in the sale request:

- Level II data: see the chapter in this document for the processor you are using. Also see "[Using Decimals and Strings](#)," page 14.
  - Required API fields for a sale request. See the [Secure Acceptance Checkout API Integration Guide](#) or the [Secure Acceptance Hosted Checkout Integration Guide](#).
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## Requesting a Credit with Level II and Level III Data

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Requesting a credit with Level II and Level III data is not available with Secure Acceptance. To include Level II data in a credit request you must use the CyberSource API.

Include the following information in the credit request:

- Basic API fields required for every capture request. For more information see [Credit Card Services Using the SCMP API](#) or [Credit Card Services Using the Simple Order API](#).
- Level II data: depending on which API you are using see [Level II and Level III Processing Using the SCMP API](#) or [Level II and Level III Processing Using the Simple Order API](#) for the processor you are using.

## Using Decimals and Strings

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CyberSource uses decimal points in all amount and tax rate fields; CyberSource does not use implied decimal points. For example, if the amount of the product being purchased is 29.95, set that field to 29 . 95.

For tax rates used with Level III transactions, you need to include a decimal point in the value. For example, if a tax rate is 1%, you should set that field to 0 . 01.

For many of the fields described in this document, Visa and MasterCard permit different lengths for alphanumeric (string) input. CyberSource accepts any length you provide. If the value you provide is longer than the card association permits, CyberSource truncates the value, keeping the left-most portion of the value. If the value you provide is shorter than the card association requires, CyberSource pads the field before sending it to the processor.

# American Express Direct: Level II



## Note

On American Express Direct, Level II data is supported only for merchants in the U.S. who are doing business in U.S. dollars.



## Important

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Order-Level Fields

**Table 2** Order-Level Fields for American Express Direct

Secure Acceptance Field Name	American Express Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
amex_data_taa1	Charge Description 1	Four Transaction Advice Addendum fields. These fields are used to display descriptive information about a transaction on your customer's American Express card statement. If you are sending any TAA fields, start with <b>amex_data_taa1</b> , then ... <b>taa2</b> , and so on. Skipping a TAA field causes subsequent TAA fields to be ignored.  Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.	Level II  ■ American Express (O but recommended)	String (40)
amex_data_taa2	Charge Description 2			
amex_data_taa3	Charge Description 3			
amex_data_taa4	Charge Description 4			

Table 2 Order-Level Fields for American Express Direct (Continued)

Secure Acceptance Field Name	American Express Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
bill_to_forename	Requestor Name	Requestor's first name. Include this value when the card member is not the person who ordered or purchased the product or service.  This field and <b>bill_to_surname</b> together should not exceed 37 characters.	Level II <ul style="list-style-type: none"> <li>■ American Express (O)</li> </ul>	String (See description)
bill_to_surname	Requestor Name	Requestor's last name. Include this value when the card member is not the person who ordered or purchased the product or service.  This field and <b>bill_to_forename</b> together should not exceed 37 characters.	Level II <ul style="list-style-type: none"> <li>■ American Express (O)</li> </ul>	String (See description)
ship_from_postal_code	Ship-to Postal Code	Postal code for the shipping address. The postal code must consist of 5 to 9 digits.  The postal code is required. You can provide the postal code by including <b>ship_from_postal_code</b> in the request or by making sure the postal code is set for your CyberSource account.  If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789  If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] <b>Example</b> A1B 2C4	Level II <ul style="list-style-type: none"> <li>■ American Express (See description)</li> </ul>	String (10)
user_po	Card member Reference Number	Value used by your customer to identify the order. This value is typically a purchase order number, cost center, or project number.	Level II <ul style="list-style-type: none"> <li>■ American Express (O)</li> </ul>	String (17)



## Item-Level Fields



When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

**Table 3 Item-Level Fields for American Express Direct**

Secure Acceptance Field Name	American Express Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	No corresponding American Express Direct field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II <ul style="list-style-type: none"> <li>American Express (O)</li> </ul>	String (23)
item_#_quantity	Charge Item Quantity 1	Quantity of the product being purchased. The default value is 1.	Level II <ul style="list-style-type: none"> <li>American Express (O but recommended)</li> </ul>	Nonnegative integer (3)
item_#_tax_amount	Total Tax Amount	Total tax to apply to the product. CyberSource adds all the <b>item_#_tax_amount</b> values to calculate the Total Tax Amount that is sent to the processor.  The <b>item_#_tax_amount</b> value cannot be negative. This field is additive. For example, if you send one item with <b>unit_price</b> of 10.00 and <b>taxAmount</b> of 0.80, and you send another item with <b>unit_price</b> of 20.00 and <b>tax_amount</b> of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The <b>item_#_tax_amount</b> and the <b>item_#_unit_price</b> values must be in the same currency.	Level II <ul style="list-style-type: none"> <li>American Express (R)</li> </ul>	Integer (12)
item_#_unit_price	Charge Item Amount 1	Per-item price of the product. This value cannot be negative. You can include a decimal point (.) in this field, but you cannot include any other special characters. The amount will be truncated at the request level to the correct number of decimal places.	Level II <ul style="list-style-type: none"> <li>American Express (O but recommended)</li> </ul>	Integer (12)

# Chase Paymentech Solutions: Level II and Level III



**Important**

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Processor Specification Used

The specifications that CyberSource used to implement Level III processing for Chase Paymentech Solutions are:

- *Paymentech's 120-Byte Technical Specification, Rev 2.0.0*, December 8, 2003
- *Paymentech's 96-Byte and 120-Byte Batch Technical Specification Addendum, Rev. 2.0.0*, April 1, 2004

The records referenced are:

- Procurement Level 3—Visa: Order Level Record, Record #1, Record #2
- Procurement Level 3—MasterCard: Order Level Record, Record #1, Record #2

## Order-Level Fields

**Table 4 Order-Level Fields for Chase Paymentech Solutions**

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_amount	Alternate Tax Amount	Total amount of alternate tax for the order.	Level III <ul style="list-style-type: none"> <li>MasterCard (O)</li> </ul>	String (10)
alternate_tax_id	Alternate Tax ID	Your tax ID number to use for the alternate tax amount. Required if you set Alternate Tax Amount to any value, including zero. You may send this field without sending Alternate Tax Amount.	Level III <ul style="list-style-type: none"> <li>MasterCard (See description)</li> </ul>	String (15)
amex_data_taa1	TAA1	Four Transaction Advice Addendum fields. These fields are used to display descriptive information about a transaction on your customer's American Express card statement. If you are sending any TAA fields, start with <b>amex_data_taa1</b> , then <b>...taa2</b> , and so on. Skipping a TAA field causes subsequent TAA fields to be ignored.  Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.  The <b>amex_data_taa1</b> field is required for Level II transactions for American Express cards for Chase Paymentech Solutions, but the other TAA fields are optional.	Level II <ul style="list-style-type: none"> <li>American Express (See description)</li> </ul>	String (40)
amex_data_taa2	TAA2			
amex_data_taa3	TAA3			
amex_data_taa4	TAA4			
amount	No corresponding Chase Paymentech Solutions field	Grand total for the entire capture or credit request.	Level III <ul style="list-style-type: none"> <li>Visa (R)</li> <li>MasterCard (R)</li> </ul>	String (15)
discount_amount	Discount Amount Applied to Order	Total discount applied to the order. For example: a 20.00 discount off the order total.	Level III <ul style="list-style-type: none"> <li>Visa (R for Level III interchange)</li> </ul>	String (13)

Table 4 Order-Level Fields for Chase Paymentech Solutions (Continued)

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
duty_amount	Duty Amount	Total charges for any import or export duties included in the order.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange)</li> </ul>	Visa: String (13) MasterCard : String (10)
freight_amount	Freight Amount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include the <b>amount</b> field.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange)</li> </ul>	Visa: String (13) MasterCard : String (10)
purchasing_level	No corresponding Chase Paymentech Solutions field	Flag that indicates the sale request is for Level III processing. Set to 3.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for captures; not used for credits)</li> <li>■ MasterCard (R for captures; not used for credits)</li> </ul>	String (1)
ship_from_postal_code	Ship From ZIP/Postal Code	<p>Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.</p> <p>If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]</p> <p><b>Example</b> A1B 2C4</p>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (R for best rate. Do not use all zeros or nines.)</li> </ul>	String (10)

Table 4 Order-Level Fields for Chase Paymentech Solutions (Continued)

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_country	Destination Country Code	Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i> .	Level III <ul style="list-style-type: none"> <li>■ Visa (R for best rate)</li> <li>■ MasterCard (O but recommended)</li> </ul>	String (2)
ship_to_address_postal_code	Destination ZIP/Postal Code	<p>Postal code for the shipping address. This is the same as <b>ship_from_postal_code</b> when your customer takes possession of the items at your location.</p> <p>The postal code must consist of 5 to 9 digits.</p> <p>If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]</p> <p><b>Example</b> A1B 2C4</p>	Level III <ul style="list-style-type: none"> <li>■ Visa (R for best rate)</li> <li>■ MasterCard (R for best rate. Do not use all zeros or nines.)</li> </ul>	String (10)

Table 4 Order-Level Fields for Chase Paymentech Solutions (Continued)

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	Customer Reference Number	Value used by your customer to identify the order. This value is typically a purchase order number. CyberSource recommends that you do not populate the field with all zeros or nines.	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O)</li> <li>■ American Express (R for purchase/procurement cards; otherwise O)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O)</li> </ul>	String (25)
vat_tax_amount	VAT/Tax Amount	Total amount of VAT or other tax included in the order.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (13)
vat_tax_rate	VAT/Tax Rate	<p>Rate of VAT or other tax for the order.</p> <p><b>Example</b> 0.040 (=4%)</p> <p>Valid range: 0.01 to 0.99 (1% to 99%, with only whole percentage values accepted; values with additional decimal places will be truncated)</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (4)

## Item-Level Fields



**Important**

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items you can have in a Level III Chase Paymentech Solutions transaction is 98. If the number of items exceeds 98, Chase Paymentech Solutions rejects the batch. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

**Table 5 Item-Level Fields for Chase Paymentech Solutions**

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_commodity_code	Item Commodity Code	Commodity code used to classify the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> </ul>	String (12)
item_#_discount_amount	Visa: Discount Amount for Line Item  MasterCard: Discount Amount	Discount applied to the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange)</li> </ul>	Visa: String (13)  MasterCard: String (10)
item_#_discount_indicator	Discount Indicator	Flag that indicates whether the amount is discounted. Possible values: <ul style="list-style-type: none"> <li>■ Y: amount is discounted</li> <li>■ N: amount is not discounted</li> </ul> If you do not provide a value but you set Discount Amount to a value greater than zero, then CyberSource sets this field to Y.	Level III <ul style="list-style-type: none"> <li>■ MasterCard (R for Level III interchange)</li> </ul>	String (1)
item_#_gross_net_indicator	Gross/Net Indicator	Flag that indicates whether the tax amount is included in the Line Item Total. Possible values: <ul style="list-style-type: none"> <li>■ Y: item amount includes tax amount</li> <li>■ N: item amount does not include tax amount</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ MasterCard (R)</li> </ul>	String (1)

**Table 5 Item-Level Fields for Chase Paymentech Solutions (Continued)**

<b>Secure Acceptance Field Name</b>	<b>Chase Paymentech Solutions Field Name</b>	<b>Description</b>	<b>Used By: Required (R) or Optional (O)</b>	<b>Data Type &amp; Length</b>
item_#_invoice_number	No corresponding Chase Paymentech Solutions field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> <li>■ American Express (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (23)
item_#_code	Product Code	Product code for the item. In the United States, this may be a UPC code, part number, or product number. If you do not provide this value, CyberSource sets it to default.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.)</li> </ul>	String (12)
item_#_name	Description	Text description of the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.)</li> </ul>	Visa: String (26) MasterCard: String (35)
item_#_quantity	Quantity	Number of units of the item purchased. Must be a whole number. If you do not provide this value, CyberSource sets it to 1.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.)</li> </ul>	Visa: Integer (12) MasterCard: Integer (5)



Table 5 Item-Level Fields for Chase Paymentech Solutions (Continued)

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax_amount	Tax Amount	Total tax to apply to the product. This value cannot be negative.  The <b>item_#_tax_amount</b> field is additive. For example, if you send one item with <b>unit_price</b> of 10.00 and <b>tax_amount</b> of 0.80, and you send another item with <b>unit_price</b> of 20.00 and <b>tax_amount</b> of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The <b>item_#_tax_amount</b> and the <b>item_#_unit_price</b> must be in the same currency.	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> <li>■ American Express (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange)</li> </ul>	Visa: String (13)  MasterCard: String (10)
item_#_tax_rate	Tax Rate	Tax rate applied to the item.  Visa: Valid range is 0.01 to 0.99 (1% to 99%, with only whole percentage values accepted; values with additional decimal places will be truncated).  MasterCard: Valid range is 0.00001 to 0.99999 (0.001% to 99.999%).	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange)</li> </ul>	Visa: String (4)  MasterCard: String (7)
item_#_tax_type_applied	Tax Type Applied	Type of tax being applied to the item.	Level III <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (4)
item_#_total_amount	Line Item Total	Total amount for the item. Normally calculated as the unit price x quantity.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R. Do not use all zeros or spaces.)</li> </ul>	Visa: String (13)  MasterCard: String (10)
item_#_unit_of_measure	Unit of Measure	Unit of measure, or unit of measure code, for the item. See <a href="#">Appendix A, "Codes for Units of Measurement," on page 109</a> .	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange. Must not be all zeros or spaces)</li> </ul>	Visa: String (12)  MasterCard: String (3)

Table 5 Item-Level Fields for Chase Paymentech Solutions (Continued)

Secure Acceptance Field Name	Chase Paymentech Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_price	Unit Cost	Unit cost of the item purchased. <b>Important</b> For a Level III transaction, this value cannot be zero (0).	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> <li>■ American Express (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (13)

# CyberSource through VisaNet: Level II and Level III



**Important**

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Supported Acquirers

The following CyberSource through VisaNet acquirers are supported for Level II and Level III processing:

- Absa Bank
- Asia Commercial Bank (ACB)
- Auckland Savings Bank (ASB)
- Australia and New Zealand Banking Group Limited (ANZ)
- Axis Bank Ltd. of India
- Bangkok Bank Ltd.
- Bank Muscat of Oman
- Bank of Ayudhya (BAY)
- Banque Pour Le Commerce Exterieur Lao (BCEL)
- Barclays Bank Botswana
- Barclays Bank Mauritius Limited
- Barclays Bank of Ghana Limited, Barclays Bank of Tanzania Limited, and Barclays Bank of Uganda Limited
- Barclays Bank of Kenya
- Barclays Bank of Zambia
- Barclays Bank Seychelles
- Citibank Malaysia
- Citibank Singapore Ltd.

- Commercial Bank of Qatar
- First Data Merchant Solutions in Brunei
- First Data Merchant Solutions in Hong Kong
- First Data Merchant Solutions in Malaysia
- First Data Merchant Solutions in Singapore
- Habib Bank Ltd. (HBL)
- HDFC Bank Ltd. of India
- I&M Bank
- National Bank of Abu Dhabi (NBAD)
- Overseas Chinese Banking Corp (OCBC)
- Promerica in Honduras and Nicaragua
- United Overseas Bank (UOB) in Singapore and Vietnam
- Vantiv
- Vietcombank
- VietinBank
- Wing Lung Bank

## Order-Level Fields

**Table 6** Order-Level Fields for CyberSource through VisaNet

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
amexdata_taa1	amexDataTAA1	Four transaction advice addendum fields. These fields are used to display descriptive information about CPS item(s) on your customer's American Express card statement. If you are sending any TAA fields, start with <b>amexdata_taa1</b> , then <b>...taa2</b> , and so on. Skipping a TAA field causes subsequent TAA fields to be ignored.	Level II ■ American Express (O)	String (40)
amexdata_taa2	amexDataTAA2			
amexdata_taa3	amexDataTAA3			
amexdata_taa4	amexDataTAA4			
		<p><b>Note</b> These fields may be required depending on the processing method you use and if the customer provides charge description data.</p> <p>Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.</p>		

Table 6 Order-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
discount_amount	discountAmount	Total discount applied to the order. For example: a 20.00 discount off the order total.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)
duty_amount	dutyAmount	Total charges for any import or export duties included in the order.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)
freight_amount	freightAmount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include the <b>amount</b> field.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)
merchant_vat_registration_number	merchantVAT Registration Number	Your government-assigned tax identification number.  <b>Note</b> For Payouts, the maximum length of this field is different. See <i>Payouts for CyberSource through VisaNet Using the Simple Order API</i> or <i>Payouts for CyberSource through VisaNet Using the SCMP API</i> .	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (20)

Table 6 Order-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
national_tax_indicator	nationalTaxIncluded	<p>Flag that indicates whether a national tax is included in the order total. Possible values:</p> <ul style="list-style-type: none"> <li>■ 0: national tax not included</li> <li>■ 1: national tax included</li> </ul> <p>This value must be 1 if the sum of all <b>national_tax</b> values &gt; 0.</p> <p>If you do not include any <b>national_tax</b> values in your request, CyberSource does not include <b>national_tax_indicator</b> in the data it sends to the processor.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (Required if the sum of all <b>national_tax</b> values = 0; otherwise, optional.)</li> <li>■ Mastercard (Required if the sum of all <b>national_tax</b> values = 0; otherwise, optional.)</li> <li>■ American Express (Required if the sum of all <b>national_tax</b> values = 0; otherwise, optional.)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (Required if the sum of all <b>national_tax</b> values = 0; otherwise, optional.)</li> <li>■ Mastercard (Required if the sum of all <b>national_tax</b> values = 0; otherwise, optional.)</li> </ul>	String (1)
purchaser_order_date	purchaserOrderDate	Date the order was processed. Format: YYMMDD	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (6)

Table 6 Order-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchaser_vat_registration_number	purchaserVAT Registration Number	Customer's government-assigned tax identification number. <b>Note</b> For Payouts, the maximum length of this field is different. See <i>Payouts for CyberSource through VisaNet Using the Simple Order API</i> or <i>Payouts for CyberSource through VisaNet Using the SCMP API</i> .	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (20)
purchasing_level	No corresponding CyberSource through VisaNet field	Flag that indicates the capture or credit request includes Level III data. Set the value for this field to 3. See <a href="#">"Requesting a Sale with Level II and Level III Data," page 13.</a>	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ Mastercard (R)</li> </ul>	String (1)
ship_from_postal_code	shipFrom Address	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.  If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789  If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] <b>Example</b> A1B 2C4	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (10)

Table 6 Order-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_postal_code	shipTo Address	<p>Postal code for the shipping address. The postal code must consist of 5 to 9 digits.</p> <p>When the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>When the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space][numeric][alpha][numeric]</p> <p><b>Example</b> A1B 2C3</p> <p>This value is the same as the value for <b>ship_from_zip</b> when your customer takes possession of the items at your location.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> <li>■ American Express (O)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (20)
ship_to_address_state	state	<p>State or province of the shipping address. Use the <a href="#">State, Province, and Territory Codes for the United States and Canada</a>.</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (3)
summary_commodity_code	summary Commodity Code	<p>International description code of the overall order's goods or services. Contact your acquirer for a list of codes.</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (4)



Table 6 Order-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
tax_indicator	localTaxIncluded	<p>Flag that indicates whether an order is taxable. Possible values:</p> <ul style="list-style-type: none"> <li>■ Y: the order is taxable.</li> <li>■ N: the order is not taxable.</li> </ul> <p>This value must be Y if the sum of all <b>tax_amount</b> values &gt; 0.</p> <p>If you do not include any <b>tax_amount</b> values in your request, CyberSource does not include <b>tax_indicator</b> in the data it sends to the processor.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (Required if the sum of all <b>tax_amount</b> values = 0; otherwise, optional.)</li> <li>■ Mastercard (Required if the sum of all <b>tax_amount</b> values = 0; otherwise, optional.)</li> <li>■ American Express (Required if the sum of all <b>tax_amount</b> values = 0; otherwise, optional.)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (Required if the sum of all <b>tax_amount</b> values = 0; otherwise, optional.)</li> <li>■ Mastercard (Required if the sum of all <b>tax_amount</b> values = 0; otherwise, optional.)</li> </ul>	String (1)

Table 6 Order-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	customer Code	Value that identifies your customer.	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ Mastercard (R)</li> <li>■ American Express (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ Mastercard (R)</li> </ul>	String with letters and numbers only (17)
vat_invoice_ref_number	vatInvoice Reference Number	Invoice number associated with the transaction.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (15)
vat_tax_rate	vatTaxRate	Tax rate or other tax for the order. A maximum of 2 decimal places is allowed. <b>Example</b> 60% is 60.00	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (4)

## Item-Level Fields



**Important**

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 7 Item-Level Fields for CyberSource through VisaNet

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_commodity_code	commodityCode	International description code used to classify the item. Contact your acquirer for a list of codes.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)

Table 7 Item-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_discount_amount	discountAmount	Discount applied to the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)
item_#_discount_rate	discountRate	Rate the item is discounted. A maximum of 2 decimal places is allowed.  <b>Example</b> 5.25 (=5.25%)	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (5)
item_#_invoice_number	invoiceNumber	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> <li>■ American Express (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (23)
item_#_national_tax	nationalTax Amount	Amount of national tax.  This value cannot exceed 99999999999 (twelve 9s). This value cannot be negative.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> <li>■ American Express (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)
item_#_product_code	productCode	Product code for the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (15)
item_#_product_name	productName	Product name for the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (35)

Table 7 Item-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_quantity	quantity	Number of units of the item purchased. A maximum of 4 decimal places is allowed. For example 1 . 1234. If you do not provide this value, CyberSource sets it to 1 . 0 .	Level II <ul style="list-style-type: none"> <li>■ American Express (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)
item_#_tax_amount	localTax Amount	Total tax to apply to the product. This value cannot exceed 999999999999 (twelve 9s). This value cannot be negative.  This value is the amount of state or provincial tax included in the transaction amount.  If you do not include this field in your request, CyberSource sets this field to the default value of 0.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> <li>■ American Express (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)
item_#_tax_rate	taxRate	Tax rate applied to the item. A maximum of 2 decimal places is allowed. Valid range is 0.01 to 99.99. The value can also be zero.  For example: <ul style="list-style-type: none"> <li>■ 60% is offer0:tax_rate=60.00</li> <li>■ 25.5% is offer0:tax_rate=25.5</li> <li>■ 33.33% is offer0:tax_rate=33.33</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (4)
item_#_total_amount	totalAmount	Total purchase amount for the item. Normally calculated as the unit price x quantity.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)
item_#_unit_of_measure	unitOfMeasure	Unit of measure for the item. See <a href="#">"Codes for Units of Measurement," page 109.</a>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)

Table 7 Item-Level Fields for CyberSource through VisaNet (Continued)

Secure Acceptance Field Name	CyberSource through VisaNet Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_price	unitPrice	<p>Per-item price of the product. This value cannot be negative. You can include a decimal point (.), but you cannot include any other special characters. A maximum of 4 decimal places is allowed. CyberSource truncates the amount to the correct number of decimal places.</p> <p><b>Important</b> For a Level III transaction, this value cannot be zero (0).</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ American Express (O)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ Mastercard (O)</li> </ul>	String (12)

# FDC Compass: Level II and Level III



**Important**

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Processor Specification Used

The specification that CyberSource used to implement Level III processing for FDC Compass is the Compass 120-Byte Processing Technical Specification, Version 1.9, July 28, 2009.

## Order-Level Fields

**Table 8** Order-Level Fields for FDC Compass

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_amount	Alternate Tax Amount	Total amount of alternate tax for the order.	Level III ■ MasterCard (O)	String (10)
alternate_tax_id	Alternate Tax ID	Your tax ID number to use for the alternate tax amount. Required if you set Alternate Tax Amount to any value, including zero. You may send this field without sending Alternate Tax Amount.	Level III ■ MasterCard (See description)	String (15)

Table 8 Order-Level Fields for FDC Compass (Continued)

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
amex_data_taa1	TAA1	<p>Four Transaction Advice Addendum fields. These fields are used to display descriptive information about a transaction on your customer's American Express card statement. If you are sending any TAA fields, start with <b>amex_data_taa1</b>, then ...<b>taa2</b>, and so on. Skipping a TAA field causes subsequent TAA fields to be ignored.</p> <p>Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.</p> <p>The <b>amex_data_taa1</b> field is required for Level II transactions for American Express cards for FDC Compass, but the other TAA fields are optional.</p>	Level II <ul style="list-style-type: none"> <li>■ American Express (See description)</li> </ul>	String (40)
amex_data_taa2	TAA2			
amex_data_taa3	TAA3			
amex_data_taa4	TAA4			
amount	No corresponding FDC Compass field	Grand total for the entire capture or credit request.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (15)
discount_amount	Discount Amount Applied to Order	Total discount applied to the order. For example: a 20.00 discount off the order total.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (13)
duty_amount	Duty Amount	Total charges for any import or export duties included in the order.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	Visa: String (13) MasterCard : String (10)
freight_amount	Freight Amount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include the <b>amount</b> field.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	Visa: String (13) MasterCard : String (10)
purchasing_level	No corresponding FDC Compass field	Flag that indicates the sale request is for Level III processing. Set to 3.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for captures; not used for credits)</li> <li>■ MasterCard (R for captures; not used for credits)</li> </ul>	String (1)

Table 8 Order-Level Fields for FDC Compass (Continued)

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_from_postal_code	Ship From ZIP/Postal Code	<p>Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.</p> <p>If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789</p> <p>If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] <b>Example</b> A1B 2C4</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (R for best rate. Do not use all zeros or nines.)</li> </ul>	String (10)
ship_to_address_country	Destination Country Code	<p>Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i>.</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for best rate)</li> <li>■ MasterCard (O but recommended)</li> </ul>	String (2)
ship_to_address_postal_code	Destination ZIP/Postal Code	<p>Postal code for the shipping address. This is the same as <b>ship_from_address_postal_code</b> when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits.</p> <p>If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789</p> <p>If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] <b>Example</b> A1B 2C4</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for best rate)</li> <li>■ MasterCard (R for best rate. Do not use all zeros or nines.)</li> </ul>	String (10)



Table 8 Order-Level Fields for FDC Compass (Continued)

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	Customer Reference Number	Value used by your customer to identify the order. This value is typically a purchase order number. CyberSource recommends that you do not populate the field with all zeros or nines.	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O)</li> <li>■ American Express (R for purchase/procurement cards; otherwise O)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O)</li> </ul>	String (25)
vat_tax_amount	VAT/Tax Amount	Total amount of VAT or other tax included in the order.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (13)
vat_tax_rate	VAT/Tax Rate	<p>Rate of VAT or other tax for the order.</p> <p><b>Example</b> 0.040 (=4%)</p> <p>Valid range: 0.01 to 0.99 (1% to 99%, with only whole percentage values accepted; values with additional decimal places will be truncated)</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (4)

## Item-Level Fields



**Important**

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items you can have in a Level III FDC Compass transaction is 98. If the number of items exceeds 98, FDC Compass rejects the batch. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

**Table 9 Item-Level Fields for FDC Compass**

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_commodity_code	Item Commodity Code	Commodity code used to classify the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> </ul>	String (12)
item_#_discount_amount	Visa: Discount Amount for Line Item  MasterCard: Discount Amount	Discount applied to the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	Visa: String (13)  MasterCard: String (10)
item_#_discount_indicator	Discount Indicator	Flag that indicates whether the amount is discounted. Possible values:  <ul style="list-style-type: none"> <li>■ Y: amount is discounted</li> <li>■ N: amount is not discounted</li> </ul> If you do not provide a value but you set Discount Amount to a value greater than zero, then CyberSource sets this field to Y.	Level III <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (1)
item_#_gross_net_indicator	Gross/Net Indicator	Flag that indicates whether the tax amount is included in the Line Item Total. Possible values:  <ul style="list-style-type: none"> <li>■ Y: item amount includes tax amount</li> <li>■ N: item amount does not include tax amount</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ MasterCard (R)</li> </ul>	String (1)

Table 9 Item-Level Fields for FDC Compass (Continued)

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	No corresponding FDC Compass field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> <li>■ American Express (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (23)
item_#_code	Product Code	Product code for the item. In the United States, this may be a UPC code, part number, or product number. If you do not provide this value, CyberSource sets it to default.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.)</li> </ul>	String (12)
item_#_name	Description	Text description of the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.)</li> </ul>	Visa: String (26) MasterCard: String (35)
item_#_quantity	Quantity	Number of units of the item purchased. Must be a whole number. If you do not provide this value, CyberSource sets it to 1.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.)</li> </ul>	Visa: Integer (12) MasterCard: Integer (5)

Table 9 Item-Level Fields for FDC Compass (Continued)

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax_amount	Tax Amount	<p>Total tax to apply to the product. This value cannot be negative.</p> <p>The <b>item_#_tax_amount</b> field is additive. For example, if you send one item with <b>unit_price</b> of 10.00 and <b>tax_amount</b> of 0.80, and you send another item with <b>unit_price</b> of 20.00 and <b>tax_amount</b> of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The <b>item_#_tax_amount</b> and the <b>item_#_unit_price</b> must be in the same currency.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> <li>■ American Express (R)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange)</li> </ul>	<p>Visa: String (13)</p> <p>MasterCard: String (10)</p>
item_#_tax_rate	Tax Rate	<p>Tax rate applied to the item.</p> <p>Visa: Valid range is 0.01 to 0.99 (1% to 99%, with only whole percentage values accepted; values with additional decimal places will be truncated).</p> <p>MasterCard: Valid range is 0.00001 to 0.99999 (0.001% to 99.999%).</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange)</li> </ul>	<p>Visa: String (4)</p> <p>MasterCard: String (7)</p>
item_#_tax_type_applied	Tax Type Applied	Type of tax being applied to the item.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (4)
item_#_total_amount	Line Item Total	Total amount for the item. Normally calculated as the unit price x quantity.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R. Do not use all zeros or spaces.)</li> </ul>	<p>Visa: String (13)</p> <p>MasterCard: String (10)</p>
item_#_unit_of_measure	Unit of Measure	Unit of measure, or unit of measure code, for the item. See <a href="#">Appendix A, "Codes for Units of Measurement," on page 109</a> .	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange. Must not be all zeros or spaces)</li> </ul>	<p>Visa: String (12)</p> <p>MasterCard: String (3)</p>

Table 9 Item-Level Fields for FDC Compass (Continued)

Secure Acceptance Field Name	FDC Compass Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_price	Unit Cost	Unit cost of the item purchased. <b>Important</b> For a Level III transaction, this value cannot be zero (0).	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> <li>■ American Express (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (13)

# FDC Nashville Global: Level II and Level III



**Important**

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

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Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.



**Important**

Starting May 1, 2012: Due to the limited functionality of the **supplier\_order\_reference** field, CyberSource recommends that you use the item-level field **item\_#\_name** instead. Include only one of these fields in a request; including both fields could result in an error.

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## Processor Specification

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The specification that CyberSource used to implement Level III processing for FDC Nashville Global is the *First Data PTS Specification, v2010-2*, October 30, 2010.

## Order-Level Fields

Table 10 Order-Level Fields for FDC Nashville Global

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_amount	Other Tax Amount	Amount of all taxes, excluding the local tax ( <b>item_#_tax_amount</b> ) and national tax ( <b>item_#_national_tax</b> ) included in the total tax.	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for non-U.S. transactions; otherwise, not used)</li> <li>■ MasterCard (R for non-U.S. transactions; otherwise, not used)</li> <li>■ American Express (R for non-U.S. transactions; otherwise, not used)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O for non-U.S. transactions; otherwise, not used)</li> <li>■ MasterCard (O for non-U.S. transactions; otherwise, not used)</li> </ul>	String (11)

Table 10 Order-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_indicator	Other Tax Indicator	Flag that indicates whether the alternate tax amount ( <b>alternate_tax_amount</b> ) is included in the request. Possible values: <ul style="list-style-type: none"> <li>0: alternate tax amount is not included in the request.</li> <li>1: alternate tax amount is included in the request.</li> </ul>	<p>Level II</p> <ul style="list-style-type: none"> <li>MasterCard (R for non-U.S. MasterCard transactions; otherwise, not used)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>MasterCard (O for non-U.S. MasterCard transactions; otherwise, not used)</li> </ul>	String (1)
amount	No corresponding FDC Nashville Global field	Grand total for the entire capture or credit request.	<p>Level III</p> <ul style="list-style-type: none"> <li>Visa (R)</li> <li>MasterCard (R)</li> </ul>	String (15)
discount_amount	Discount Amount	Total discount applied to the order. This value cannot be negative. For example: a 20.00 discount off the order total.	<p>Level II</p> <ul style="list-style-type: none"> <li>Visa (R)</li> <li>MasterCard (O)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>Visa (O)</li> </ul>	String (11)
duty_amount	Duty Amount	Total charges for any import or export duties included in the order. This value cannot be negative.	<p>Level II</p> <ul style="list-style-type: none"> <li>Visa (R)</li> <li>MasterCard (O)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>Visa (O)</li> </ul>	String (11)
freight_amount	Freight Amount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include the <b>amount</b> field.	<p>Level III</p> <ul style="list-style-type: none"> <li>Visa (O)</li> <li>MasterCard (O)</li> </ul>	String (13)



Table 10 Order-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchaser_vat_registration_number	Customer VAT Registration Number	Identification number assigned to the purchasing company by the tax authorities.	Level II <ul style="list-style-type: none"> <li>■ Visa (R for non-U.S. Visa transactions; otherwise, not used)</li> </ul>	String (13)
purchasing_level	No corresponding FDC Nashville Global field	Flag that indicates the capture or credit request is for Level III processing. Set to 3.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for captures; not used for credits)</li> <li>■ MasterCard (R for captures; not used for credits)</li> </ul>	String (1)
ship_from_postal_code	Ship From Zip	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.  If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789  If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] <b>Example</b> A1B 2C4	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (10)

Table 10 Order-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_country	Destination Country	<p>Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i>.</p> <p><b>Note</b> If you include the <b>ship_to_address_country</b> field in a request and if the ship-to country is the U.S. or Canada, the request must also include the <b>ship_to_address_state</b> field.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ MasterCard (R)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R if <b>purchase Totals_freight Amount</b> is included; otherwise, recommended for best rate)</li> <li>■ MasterCard (O but recommended)</li> </ul>	String (2)
ship_to_address_postal_code	Destination Zip	<p>Postal code for the shipping address. This is the same as <b>ship_to_address_postal_code</b> when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits.</p> <p>If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]</p> <p><b>Example</b> A1B 2C4</p> <p>If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code for the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> <li>■ American Express (R)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (10)

Table 10 Order-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_state		<p>State or province of the address to ship the product to. Use the <a href="#">State, Province, and Territory Codes for the United States and Canada</a>.</p> <p>This field must be included in a request if the <b>ship_to_address_country</b> field is included and the ship-to country is the U.S. or Canada.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ MasterCard (R)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (See description)</li> <li>■ MasterCard (See description)</li> </ul>	String (2)
supplier_order_reference	Item Description Part A	<p>Text description of the item.</p> <p><b>Important</b> Starting May 1, 2012: Due to the limited functionality of the <b>supplier_order_reference</b> field, CyberSource recommends that you use the item-level field <b>item_#_name</b> instead. Include only one of these fields in a request; including both fields could result in an error.</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R for reduced interchange)</li> </ul>	String (25)
user_po	Customer Code	<p>Value used by your customer to identify the order. This value is typically a purchase order number. You must provide a value in this field or in the <b>reference_number</b> field. CyberSource recommends that you do not populate this field with all zeros or nines.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (See description)</li> <li>■ MasterCard (See description)</li> <li>■ American Express (See description)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (See description)</li> <li>■ MasterCard (See description)</li> </ul>	String (25)
vat_invoice_reference_number	VAT Invoice Reference Number	VAT invoice number associated with the transaction.	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for non-U.S. Visa transactions; otherwise, not used)</li> </ul>	String (15)

Table 10 Order-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
vat_tax_amount	VAT/Tax Amount	Total amount of VAT or other tax on freight or shipping only.	Level II <ul style="list-style-type: none"> <li>■ Visa (O for non-U.S. Visa transactions; otherwise, not used)</li> <li>■ MasterCard (O for non-U.S. Visa transactions; otherwise, not used)</li> <li>■ American Express (O for non-U.S. Visa transactions; otherwise, not used)</li> </ul>	String (11)
vat_tax_rate	VAT/Tax Rate	Vat tax rate for freight or shipping.	Level II <ul style="list-style-type: none"> <li>■ Visa (O for non-U.S. transactions; otherwise, not used)</li> <li>■ MasterCard (O for non-U.S. transactions; otherwise, not used)</li> <li>■ American Express (O for non-U.S. transactions; otherwise, not used)</li> </ul>	String (5)

## Item-Level Fields



When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

**Table 11 Item-Level Fields for FDC Nashville Global**

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_amount	Item Other Tax Amount	<p>Visa: VAT or other tax amount</p> <p>MasterCard: Tax amount collected for a special type of tax</p> <p><b>Important</b> For MasterCard, do not set this field to 0 (zero).</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (13)
item_#_alternate_tax_applied	Item Tax Type Applied	<p>MasterCard: Flag that defines tax categories for domestic processing in certain locations.</p> <p>Visa: VAT or other tax type.</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (4)
item_#_alternate_tax_id	Tax Amount 1 Tax ID	Your tax ID number to use for the alternate tax amount.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ MasterCard (R if <b>item_#_alternate_tax_amount</b> is included; otherwise O)</li> </ul>	String (15)
item_#_alternate_tax_rate	Item Tax Rate Applied	<p>MasterCard: Tax rate for a type of tax collected.</p> <p>Visa: VAT or other tax rate.</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (5)

Table 11 Item-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_type	Tax Type Identifier	Flag that indicates the type of tax collected for <b>item_#_alternate_tax_amount</b> . Possible values: <ul style="list-style-type: none"> <li>■ 00 : unknown</li> <li>■ 01 : federal or national sales tax</li> <li>■ 02 : states sales tax</li> <li>■ 03 : city sales tax</li> <li>■ 04 : local sales tax</li> <li>■ 05 : municipal sales tax</li> <li>■ 06 : other tax</li> <li>■ 10 : value-added tax (VAT)</li> <li>■ 11 : goods and services tax (GST)</li> <li>■ 12 : provincial sales tax</li> <li>■ 20 : room tax</li> <li>■ 21 : occupancy tax</li> <li>■ 22 : energy tax</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (2)
item_#_code	Item Product Code	Product code for the item. In the United States, this may be a UPC code, part number, or product number.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R for reduced interchange)</li> </ul>	String (12)
item_#_commodity_code	Item Commodity Code	International description code used to classify the item. Contact your acquirer or FDC Nashville Global for a list of codes.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (O)</li> </ul>	String (12)
item_#_discount_amount	Item Discount Amount	Discount applied to the item. <b>Important</b> For MasterCard, do not set this field to 0 (zero).	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (13)

Table 11 Item-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	No corresponding FDC Nashville Global field	You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II <ul style="list-style-type: none"> <li>■ Visa (See description)</li> <li>■ MasterCard (See description)</li> <li>■ American Express (See description)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (See description)</li> <li>■ MasterCard (See description)</li> </ul>	String (23)
item_#_local_tax	Item Local Tax Amount	Sales tax applied to the item. <b>Important</b> For MasterCard, do not set this field to 0 (zero).	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (13)
item_#_name	Description	Text description of the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for Level III interchange)</li> <li>■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.)</li> </ul>	Visa: String (26) MasterCard: String (35)
item_#_national_tax	National Tax Amount	Amount of national tax or value added tax for countries in which more than one tax is applied. Provide this value if the <b>national_tax</b> value differs from the <b>tax_amount</b> value. If you do not provide this value, CyberSource assumes that <b>national_tax</b> is equal to <b>tax_amount</b> . <b>Important</b> For MasterCard, do not set this field to 0 (zero).	Level II <ul style="list-style-type: none"> <li>■ Visa (R for non-U.S. Visa transactions; otherwise, not used)</li> </ul>	String (11)
item_#_quantity	Item Quantity	Number of units of the item purchased. Must be a whole number. If you do not provide this value, CyberSource uses 1.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (RS for reduced interchange)</li> </ul>	Integer (12)

Table 11 Item-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_sku	Item Customer Code	<p>Identification code for the product. This field is required when <b>item_#_code</b> is not default or one of the values related to shipping and/or handling.</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (See description)</li> <li>■ MasterCard (See description)</li> </ul>	String (30)
item_#_tax_amount	Local Tax Amount	<p>Total tax to apply to the product. This value cannot be negative. The tax amount and the unit price must be in the same currency.</p> <p>The tax amount field is additive. The following example uses a two-exponent currency such as USD:</p> <ol style="list-style-type: none"> <li>You include the following items in your request: <ul style="list-style-type: none"> <li>item_0_unit_price=10.00</li> <li>item_0_quantity=1</li> <li>item_0_tax_amount=0.80</li> <li>item_1_unit_price=20.00</li> <li>item_1_quantity=1</li> <li>item_1_tax_amount=1.60</li> </ul> </li> <li>The total amount authorized will be 32.40, not 30.00 with 2.40 of tax included.</li> </ol> <p><b>Note</b> This value is the sales tax. For Visa transactions, this value must be between 0.1% and 22% of the total sale.</p> <p><b>Note</b> For Visa and American Express, if this value is 0 (zero), the order is tax exempt.</p> <p><b>Important</b> For MasterCard, do not set this field to 0 (zero).</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> <li>■ American Express (R)</li> </ul>	<p>Visa &amp; MasterCard: String (11)</p> <p>American Express: String (9)</p>



Table 11 Item-Level Fields for FDC Nashville Global (Continued)

Secure Acceptance Field Name	FDC Nashville Global Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_of_measure	Item Bulk/Unit of Measure	Unit of measure, or unit of measure code, for the item. See <a href="#">Appendix A, "Codes for Units of Measurement," on page 109</a> .	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R for reduced interchange)</li> </ul>	String (12)
item_#_unit_price	Item Unit Cost	Unit cost of the item purchased. <b>Important</b> For a Level III transaction, this value cannot be zero (0). <b>Important</b> For MasterCard, do not set this field to 0 (zero).	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> <li>■ American Express (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (13)

# FDMS Nashville: Level II



**Important**

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Order-Level Fields

**Table 12 Order-Level Fields for FDMS Nashville**

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_postal_code	<p>Postal code for the shipping address. The postal code must consist of 5 to 9 digits.</p> <p>If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha][numeric]</p> <p><b>Example</b> A1B 2C4</p> <p>If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code for the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa</li> <li>■ MasterCard</li> </ul>	String (10)

Table 12 Order-Level Fields for FDMS Nashville (Continued)

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
tax_indicator	Flag that indicates whether an order is taxable. Possible values: <ul style="list-style-type: none"> <li>■ Y: the order is taxable.</li> <li>■ N: the order is not taxable.</li> </ul>	Level II <ul style="list-style-type: none"> <li>■ Visa</li> <li>■ MasterCard</li> </ul>	String (5)
user_po	Value used by your customer to identify the order. This value is typically a purchase order number. CyberSource recommends that you do not populate the field with all zeros or nines.	Level II <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O)</li> </ul>	String (25)

## Item-Level Fields



**Important**

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 13 Item-Level Fields for FDMS Nashville

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (23)
item_#_unit_price	Unit cost of the item purchased.	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (15)

# FDMS South: Level II



**Important**

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Order-Level Fields

**Table 14 Order-Level Fields for FDMS South**

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchaser_code	Customer ID reference number that identifies the customer for a Level II transaction.	Level II <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O)</li> </ul>	String (17)
purchaser_vat_registration_number	Identification number assigned to the purchasing company by the tax authorities.	Level II <ul style="list-style-type: none"> <li>■ Visa</li> </ul>	String (13)
summary_commodity_code	Categorizes purchases for VAT reporting.	Level II <ul style="list-style-type: none"> <li>■ Visa</li> </ul>	String (4)
tax_indicator	Flag that indicates whether an order is taxable. Possible values: <ul style="list-style-type: none"> <li>■ Y: the order is taxable.</li> <li>■ N: the order is not taxable.</li> </ul>	Level II <ul style="list-style-type: none"> <li>■ Visa</li> <li>■ MasterCard</li> </ul>	String (5)

Table 14 Order-Level Fields for FDMS South (Continued)

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	Value used by your customer to identify the order. This value is typically a purchase order number. CyberSource recommends that you do not populate the field with all zeros or nines.	Level II <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O)</li> </ul>	String (25)
duty_amount	Total charges for any import or export duties included in the order. This value cannot be negative.	Level II <ul style="list-style-type: none"> <li>■ MasterCard</li> </ul>	String (15)
ship_from_postal_code	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.  If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789  If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] <b>Example</b> A1B 2C4	Level II <ul style="list-style-type: none"> <li>■ MasterCard</li> </ul>	String (10)
ship_to_address_country	Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i> .	Level II <ul style="list-style-type: none"> <li>■ MasterCard</li> </ul>	String (2)

Table 14 Order-Level Fields for FDMS South (Continued)

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_ postal_code	<p>Postal code for the shipping address. The postal code must consist of 5 to 9 digits.</p> <p>If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]</p> <p><b>Example</b> A1B 2C4</p> <p>If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code for the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ MasterCard (R for purchase/procurement cards; otherwise O)</li> </ul>	String (10)

## Item-Level Fields



**Important**

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

**Table 15 Item-Level Fields for FDMS South**

Secure Acceptance Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (23)
item_#_national_tax	Amount of national tax or value added tax for countries in which more than one tax is applied. Provide this value if <b>item_#_national_tax</b> differs from <b>item_#_tax_amount</b> . If you do not provide this value, CyberSource assumes that <b>item_#_national_tax</b> is equal to <b>item_#_tax_amount</b> .	Level II <ul style="list-style-type: none"> <li>■ Visa</li> <li>■ MasterCard</li> </ul>	String (15)
item_#_tax_amount	Total tax to apply to the product. This value cannot be negative.  The <b>item_#_tax_amount</b> field is additive. For example, if you send one item with <b>item_#_unit_price</b> of 10.00 and <b>item_#_tax_amount</b> of 0.80, and you send another item with <b>item_#_unit_price</b> of 20.00 and <b>item_#_tax_amount</b> of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The <b>item_#_tax_amount</b> and the <b>item_#_unit_price</b> must be in the same currency.	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (15)
item_#_unit_price	Unit cost of the item purchased.	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (15)
item_#_vat_rate	Rate used to calculate VAT.	Level II <ul style="list-style-type: none"> <li>■ Visa</li> <li>■ MasterCard</li> </ul>	String (5)

# GPN: Level II and Level III



**Important**

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Processor Specification

The specification that CyberSource used to implement Level II and Level III processing for GPN is the *Global Payments Big Batch Message Specification, Version 2006.001*, January 2006.

## Order-Level Fields

**Table 16** Order-Level Fields for GPN

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_amount	Other Tax	Total amount of alternate tax for the order. Maximum amount is 99,999.99.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (12)
discount_amount	Discount Amount	Total discount applied to the order. For example: a 20.00 discount off the order total. Maximum amount is 99,999.99.  This field might be required for Level III processing depending on your merchant category code. Check with your processor.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (12)



Table 16 Order-Level Fields for GPN (Continued)

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
duty_amount	Duty Amount	Total charges for any import or export duties included in the order. Maximum amount is 99,999.99.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (12)
freight_amount	Freight Amount	Total freight or shipping and handling charges for the order. Maximum amount is 99,999.99. When you include this field in your request, you must also include <b>amount</b> .	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (12)
merchant_vat_registration_number	Merchant VAT Number	Your government-assigned tax identification number.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (20)
national_tax_amount	National Tax	National tax for the order. Maximum amount is 99,999.99.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (12)
purchaser_order_date	Order Date	Date the order was processed. Format: YYMMDD.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (6)
purchaser_vat_registration_number	Customer VAT Number	Customer's government-assigned tax identification number.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	Visa: String (15) MasterCard: String (20)
purchasing_level	No corresponding GPN field	Flag that indicates the capture or credit request is for Level III processing. Set to 3.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for captures; not used for credits)</li> <li>■ MasterCard (R for captures; not used for credits)</li> </ul>	String (1)

Table 16 Order-Level Fields for GPN (Continued)

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_from_postal_code	Ship From Postal/Zip Code	<p>Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.</p> <p>If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]</p> <p><b>Example</b> A1B 2C4</p>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (10)
ship_to_address_country	Destination Country Code	<p>Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i>.</p>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (2)
ship_to_address_postal_code	Destination Postal/Zip Code	<p>Postal code for the shipping address. This is the same as <b>shipFrom_postalCode</b> when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits.</p> <p>If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]</p> <p><b>Example</b> A1B 2C4</p>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (10)
ship_to_address_state	Destination State/Province Code	<p>State or province of the address to ship the product to. Use the <i>State, Province, and Territory Codes for the United States and Canada</i>.</p>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (2)

Table 16 Order-Level Fields for GPN (Continued)

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
summary_commodity_code	Summary Commodity Code and Commodity Code	International description code of the overall order's goods or services. Contact your acquirer or GPN for a list of codes.  This field might be required for Level III processing depending on your merchant category code. Check with your processor.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (4)
supplier_order_reference	Item Description	Text description of the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (25)
user_po	Market Data - "m" Customer Code and Reference Number	Value used by your customer to identify the order. This value is typically a purchase order number.	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	Visa: String (17)  MasterCard: String (25)
vat_tax_amount	VAT/Tax Amount (Freight/Shipping)	Tax amount applied to freight / shipping costs.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (12)
vat_tax_rate	VAT/Tax Rate (Freight/Shipping)	Tax rate applied to freight / shipping costs.  <b>Example</b> 0.040 (=4%)	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (4)

## Item-Level Fields



**Important**

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

**Table 17 Item-Level Fields for GPN**

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_amount	Tax Rate N	Tax rate applied to the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (5)
item_#_commodity_code	Item Commodity Code	International description code used to classify the item. Contact your acquirer or GPN for a list of codes.  This field might be required for Level III processing depending on your merchant category code. Check with your processor.	Level II <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	Visa: String (12) MasterCard: String (4)
item_#_discount_amount	Item Discount	Discount applied to the item. Maximum amount is 99,999.99.  This field might be required for all Level III processing depending on your merchant category code. Check with your processor.	Level III <ul style="list-style-type: none"> <li>■ Visa (Required for Level III interchange)</li> <li>■ MasterCard (Required for Level III interchange)</li> </ul>	String (12)
item_#_discount_rate	Item Discount Rate	Rate the item is discounted.  <b>Example</b> 5.25 (=5.25%)	Level III <ul style="list-style-type: none"> <li>■ MasterCard (Required for Level III interchange)</li> </ul>	String (5)

Table 17 Item-Level Fields for GPN (Continued)

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_invoice_number	No corresponding GPN field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (23)
item_#_quantity	Item Quantity	Number of units of the item purchased. Must be a whole number. If you do not provide this value, CyberSource uses 1.	Level III <ul style="list-style-type: none"> <li>■ Visa (Required for Level III interchange)</li> <li>■ MasterCard (Required for Level III interchange)</li> </ul>	Integer (12)
item_#_tax_amount	Level II: Amount 2 Level III: Tax Amount N	<p>Total tax to apply to the product. This value cannot be negative.</p> <p>The <b>item_#_tax_amount</b> field is additive. For example, if you send one item with <b>item_#_unit_price</b> of 10.00 and <b>item_#_tax_amount</b> of 0.80, and you send another item with <b>item_#_unit_price</b> of 20.00 and <b>item_#_tax_amount</b> of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The <b>item_#_tax_amount</b> and the <b>item_#_unit_price</b> must be in the same currency.</p> <p>Maximum amount is 99,999.99.</p> <p>For Level II, if you do not include this field in your request, CyberSource sets this field to the default value of 0.</p> <p>For Level II, this value is the sales tax. For Visa Level II transactions, this value must be zero or must be between 0.1% and 22% of the total sale.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	<p>Level II: String (10)</p> <p>Level III: String (12)</p>

Table 17 Item-Level Fields for GPN (Continued)

Secure Acceptance Field Name	GPN Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_of_measure	Unit of Measure	Unit of measure for the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (Required for Level III interchange)</li> <li>■ MasterCard (Required for Level III interchange)</li> </ul>	String (12)
item_#_unit_price	Unit Price	Unit cost of the item purchased. Maximum amount is 99,999.99.  <b>Important</b> For a Level III transaction, this value cannot be zero (0).  <b>Note</b> For each item that you include in a request, you must include the <b>amount</b> field.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (Required for Level III interchange)</li> <li>■ MasterCard (Required for Level III interchange)</li> </ul>	String (10)

# OmniPay Direct: Level II and Level III

**Important**

This document provides guidelines that indicate which fields are needed in order to obtain the best interchange rates. These guidelines are based on industry information. CyberSource recommends that you contact your acquirer for the most current information because the payment card companies can change their requirements at any time.

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**Note**

On OmniPay Direct, the only acquirer that support Level II and Level III data is First Data Merchant Solutions (Europe).

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Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Processor Specification

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The specification that CyberSource used to implement Level II and Level III processing for OmniPay Direct is *OmniPay 80Byte Electronic File Specifications, version 4.9*, September 2015.

## Order-Level Fields

Table 18 Order-Level Fields for OmniPay Direct

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
amount	Line Item Total	Grand total for the entire request.	Level II <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul>	String (12)
discount_amount	Discount Amount / Total Discount	Total discount applied to the order.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R)</li> </ul>	String (12)
duty_amount	Duty Amount	Total charges for any import or export duties included in the order.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (12)
freight_amount	Freight Amount / Shipping Amount	Total freight or shipping and handling charges for the order.  For a Level II transaction with Visa, CyberSource sets the value for this field to zero (0) when you do not include it in the request.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (O)</li> </ul>	String (12)
invoiceHeader_taxable	Detail Tax Amount Indicator	Flag that indicates whether tax is included in the total purchase amount. Possible values:  <ul style="list-style-type: none"> <li>■ <code>true</code>: tax is included in total purchase amount and tax is sum of values for all <code>item_#_taxAmount</code> fields.</li> <li>■ <code>false</code>: tax is not included in total purchase amount.</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (5)



Table 18 Order-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
local_tax_indicator	Local Tax Included	Flag that indicates whether local sales tax is included in the order total. Possible values: <ul style="list-style-type: none"> <li>■ 0: local sales tax not included</li> <li>■ 1: local sales tax included</li> <li>■ 2: tax exempt order</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (1)
merchant_vat_registration_number	Merchant VAT Registration / Single Business Reference Number / Merchant Tax ID / Corporation VAT Number	Your government-assigned tax identification number.	Level II <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	String (21)
national_tax_amount	National Tax	National tax for the order.  When you include this field in the request, you must also include the <b>item_#_taxAmount</b> field in the request.	Level II <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul>	String (12)
national_tax_indicator	National Tax Included	Flag that indicates whether a national tax is included in the order total. Possible values: <ul style="list-style-type: none"> <li>■ 0: national tax not included</li> <li>■ 1: national tax included</li> </ul>	Level II <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul>	String (1)

Table 18 Order-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchaser_order_date	Order Date	Date the order was processed. Format: YYMMDD.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (6)
purchaser_vat_registration_number	Customer VAT Registration Number	Customer's government-assigned tax identification number.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (13)
purchasing_level	No corresponding OmniPay Direct field	Flag that indicates the capture request includes Level III data. Set the value for this field to 3. For more information, see <a href="#">"CyberSource Level II and Level III Data Processing," page 12.</a>	Level III <ul style="list-style-type: none"> <li>■ Visa (R for captures)</li> <li>■ MasterCard (R for captures)</li> </ul>	String (1)
ship_from_postal_code	Ship From Postal / ZIP Code	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.  When the goods ship from the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789  When the goods ships from Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space][numeric][alpha][numeric] <b>Example</b> A1B 2C3	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (10)
ship_to_country	Destination Country Code	Country to which the product is shipped. Use the two-character <a href="#">ISO Standard Country Codes</a> .	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (3)

Table 18 Order-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_postal_code	Destination Postal / ZIP Code	<p>Postal code for the shipping address. This value is the same as the value for the <b>shipFrom_postalCode</b> field when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits.</p> <p>When the goods ship to the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>When the goods ship to Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space][numeric][alpha][numeric]</p> <p><b>Example</b> A1B 2C3</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (10)
summary_commodity_code	Summary Commodity Code	<p>International description code of the overall order's goods or services. Contact your acquirer for a list of codes.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul>	String (4)
supplier_order_reference	Purchase Identifier / Merchant Related Data / Merchant Reference Number	Text description of the item.	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	<p>Visa: String (25)</p> <p>MasterCard: String (17)</p>

Table 18 Order-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
tax_amount	Tax Amount / Total Tax Amount	Total tax amount for all the items in the order.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (R for interchange rates)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	String (12)
user_po	Customer Code / Customer Reference ID	Value used by your customer to identify the order. This value is typically a purchase order number.	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	String (25)
vat_tax_amount	VAT (Amount)	Total amount of VAT or other tax included in the order.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (12)
vat_tax_rate	VAT (Rate)	Rate of VAT or other tax for the order. <b>Example</b> 0.04 (=4%) Valid range: 0.01 to 0.99 (1% to 99%)	Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul>	String (4)

## Item-Level Fields



### Important

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3).

The maximum number of items you can include in a request is:

- American Express Level II: 4 items
- MasterCard Level III: 99 items
- Visa Level III: 99 items

You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

**Table 19** Item-Level Fields for OmniPay Direct

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_amount	VAT / Tax Amount (Freight or Shipping)	Tax amount on shipping/freight.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (12)
item_#_alternate_tax_rate	VAT / Tax Rate (Freight or Shipping)	Rate used to generate the value for the <b>item_#_alternateTaxAmount</b> field. When you include the <b>item_#_alternateTaxAmount</b> and <b>otherTax_nationalTaxAmount</b> fields and do not include the <b>item_#_alternateTaxRate</b> field, CyberSource calculates the rate as <b>otherTax_nationalTaxAmount</b> x 100 / <b>item_#_unitPrice</b> .	Level II <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul>	String (4)

Table 19 Item-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_commodity_code	Item Commodity Code	International description code used to classify the item. Contact your acquirer for a list of codes.	Level II <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	Visa: String (12) MasterCard: String (4)
item_#_discount_amount	Discount Per Line Item / Discount Amount	Discount applied to the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	String (12)
item_#_discount_indicator	Discount Indicator	Flag that indicates whether the amount is discounted. Possible values: <ul style="list-style-type: none"> <li>■ Y: amount is discounted</li> <li>■ N: amount is not discounted</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (1)
item_#_discount_rate	Item Discount Rate	Rate at which the item is discounted. <b>Example</b> 0.050 (=5%) Valid range: 0.010 to 0.999 (1% to 99.9%)	Level III <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (5)
item_#_product_code	Product Code	Type of product. This value is used to determine the product category: electronic, handling, physical, service, or shipping. The default value is default.	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (12)

Table 19 Item-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_product_name	Item Description	Text description of the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	String (26)
item_#_quantity	Quantity / Item Quantity	Number of units of the item purchased. Must be a whole number. If you do not provide this value, CyberSource uses 1.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	Visa: Integer (4) MasterCard: Integer (12)

Table 19 Item-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax_amount	Tax Amount / Total Tax Amount	<p>Total tax to apply to the product. This value cannot be negative. The tax amount and the unit price must be in the same currency.</p> <p>The tax amount field is additive. The following example uses a two-exponent currency such as USD:</p> <ol style="list-style-type: none"> <li>You include the following items in your request: <ul style="list-style-type: none"> <li>item_0_ <ul style="list-style-type: none"> <li>unitPrice=10.00</li> <li>item_0_quantity=1</li> <li>item_0_ <ul style="list-style-type: none"> <li>taxAmount=0.80</li> </ul> </li> <li>item_1_ <ul style="list-style-type: none"> <li>unitPrice=20.00</li> <li>item_1_quantity=1</li> <li>item_1_ <ul style="list-style-type: none"> <li>taxAmount=1.60</li> </ul> </li> </ul> </li> </ul> </li> <li>The total amount authorized will be 32.40, not 30.00 with 2.40 of tax included.</li> </ul></li></ol> <p>If you want to include the tax amount and also request the <b>taxService</b> service, see <a href="#">Tax Calculation Service Using the Simple Order API</a>.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R if <b>otherTax_nationalTaxAmount</b> is included)</li> <li>■ MasterCard (R for interchange rates)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R if <b>otherTax_nationalTaxAmount</b> is included)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	String (12)
item_#_tax_rate	Tax Rate / Detail Tax Rate	<p>Tax rate applied to the item.</p> <p><b>Example</b> 0.08 (=8%)</p> <p>Valid range: 0.01 to 0.99 (1% to 99%)</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	String (4)



Table 19 Item-Level Fields for OmniPay Direct (Continued)

CyberSource Field Name	OmniPay Direct Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax-status_ indicator	Tax Collected Indicator	Flag that indicates whether sales tax is included in the value for the <b>item_#_totalAmount</b> field. Possible values: <ul style="list-style-type: none"> <li>■ true: sales tax is included; <b>item_#_totalAmount</b> value must be greater than zero.</li> <li>■ false: sales tax is not included; <b>item_#_totalAmount</b> value must be zero.</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (1)
item_#_total_amount	Line Item Total / Extended Item Amount	Total purchase amount for the item. Normally calculated as the unit price * quantity.	Level II <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (12)
item_#_unit_of_measure	Unit of Measure Code / Item Unit of Measure	Unit of measure, or unit of measure code, for the item. See <a href="#">Appendix A, "Codes for Units of Measurement," on page 109</a> .	Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> </ul>	String (12)
item_#_unit_price	Unit Cost / Unit Price	Per-item price of the product. This value cannot be negative. You can include a decimal point (.), but you cannot include any other special characters. CyberSource truncates the amount to the correct number of decimal places.  <b>Important</b> For a Level III transaction, this value cannot be zero (0).	Level III <ul style="list-style-type: none"> <li>■ Visa (R for interchange rates)</li> <li>■ MasterCard (R for interchange rates)</li> </ul>	String (12)

# RBS WorldPay Atlanta: Level II and Level III



**Important**

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Processor Specification

The specification that CyberSource used to implement Level III processing for RBS WorldPay Atlanta is *RBS Worldpay API message specification, version 7.1.0*, June 2, 2009.

## Order-Level Fields

**Table 20 Order-Level Fields for RBS WorldPay Atlanta**

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchasing_level	No corresponding RBS WorldPay Atlanta field	Flag that indicates the capture or credit request is for Level III processing. Set to 3.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for captures; not used for credits)</li> <li>■ MasterCard (R for captures; not used for credits)</li> </ul>	String (1)
merchant_vat_registration_number	Merchant VAT Number	Your government-assigned tax identification number.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (20)

**Table 20 Order-Level Fields for RBS WorldPay Atlanta (Continued)**

<b>Secure Acceptance Field Name</b>	<b>RBS WorldPay Atlanta Field Name</b>	<b>Description</b>	<b>Used By: Required (R) or Optional (O)</b>	<b>Data Type &amp; Length</b>
purchaser_order_date	Order Date	Date the order was processed. Format: YYMMDD.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	Numeric (6)
purchaser_vat_registration_number	Customer VAT Number	Customer's government-assigned tax identification number.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (13)
summary_commodity_code	Commodity Code	International description code of the overall order's goods or services. Contact your acquirer for a list of codes.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (4)
tax_indicator	Tax Exempt	Flag that indicates whether an order is taxable. Possible values: <ul style="list-style-type: none"> <li>■ Y: the order is taxable.</li> <li>■ N: the order is not taxable.</li> </ul>	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (1)

Table 20 Order-Level Fields for RBS WorldPay Atlanta (Continued)

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	PC2 Customer ID	Value used by your customer to identify the order. This value is typically a purchase order number.	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.)</li> </ul>	String (25)
vat_invoice_reference_number	VAT Invoice Number	VAT invoice number associated with the transaction.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (15)
alternate_tax_amount	VAT Tax Amount	Total amount of alternate tax for the order.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (8)
alternate_tax_indicator	Alternate Tax Indicator	<p>Flag that indicates whether the alternate tax amount (<b>alternate_tax_amount</b>) is included in the request. Possible values:</p> <ul style="list-style-type: none"> <li>■ 0: alternate tax amount is not included in the request.</li> <li>■ 1: alternate tax amount is included in the request.</li> </ul>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ MasterCard (R)</li> </ul>	String (1)

Table 20 Order-Level Fields for RBS WorldPay Atlanta (Continued)

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
vat_tax_amount	VAT Tax Amount	Total amount of VAT or other tax included in the order.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	Numeric (8)
vat_tax_rate	Tax Rate	Rate of VAT or other tax for the order. <b>Example</b> 0.0400 (=4%) Valid range: 0.0001 to 0.9999 (0.01% to 99.99%)	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	Numeric (4)
discount_amount	Discount Amount	Total discount applied to the order. For example: a 20.00 discount off the order total.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	Numeric (8)
duty_amount	Duty Amount	Total charges for any import or export duties included in the order.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	Numeric (8)
freight_amount	Freight Amount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include <b>amount</b> .	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	Numeric (8)
amount	Amount	Grand total for the entire capture or credit request.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (15)
ship_from_postal_code	Origin Zip	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.  If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789  If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] <b>Example</b> A1B 2C4	Level III <ul style="list-style-type: none"> <li>■ Visa (Recommended)</li> <li>■ MasterCard (Recommended)</li> </ul>	String (10)

Table 20 Order-Level Fields for RBS WorldPay Atlanta (Continued)

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_country	Destination Country Code	<p>Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i>.</p> <p>If you do not provide this value, CyberSource uses the <b>billTo_country</b> value. If you do not provide either of these values, CyberSource uses the default value of US.</p>	Level III <ul style="list-style-type: none"> <li>■ Visa (Recommended for best rate)</li> <li>■ MasterCard (Recommended for best rate)</li> </ul>	String (3)
ship_to_address_postal_code	Destination Zip	<p>Postal code for the shipping address. The postal code must consist of 5 to 9 digits.</p> <p>If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]</p> <p><b>Example</b> A1B 2C4</p> <p>If the postal code for the shipping address is not included in the request message, CyberSource uses the postal code for the billing address. If the postal code for the billing address is not included in the request message, the postal code for the shipping address is required.</p>	Level III <ul style="list-style-type: none"> <li>■ Visa (Recommended for best rate)</li> <li>■ MasterCard (Recommended for best rate)</li> </ul>	String (10)

## Item-Level Fields



**Important**

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

**Table 21 Item-Level Fields for RBS WorldPay Atlanta**

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_id	Alternate Tax ID	Your tax ID number to use for the alternate tax amount. You must provide this value if you include Alternate Tax Amount in the request. Providing this value is optional if you do not Alternate Tax Amount.	Level III <ul style="list-style-type: none"> <li>MasterCard (See description)</li> </ul>	String (15)
item_#_commodity_code	Commodity Code	International description code used to classify the item. Contact your acquirer for a list of codes.	Level III <ul style="list-style-type: none"> <li>Visa (R)</li> </ul>	String (12)
item_#_discount_amount	Discount Amount	Discount applied to the item.	Level III <ul style="list-style-type: none"> <li>Visa (O)</li> <li>MasterCard (O)</li> </ul>	Numeric (8)
item_#_discount_rate	Discount Rate	Rate the item is discounted. <b>Example</b> 5.25 (=5.25%)	Level III <ul style="list-style-type: none"> <li>MasterCard (O)</li> </ul>	Numeric (5)
item_#_gross_net_indicator	Gross Net Indicator	Flag that indicates whether the tax amount is included in the Line Item Total. Possible values: <ul style="list-style-type: none"> <li>Y: item amount includes tax amount</li> <li>N: item amount does not include tax amount</li> </ul>	Level III <ul style="list-style-type: none"> <li>MasterCard (R)</li> </ul>	String (1)
item_#_invoice_number	No corresponding RBS WorldPay Atlanta field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level III <ul style="list-style-type: none"> <li>Visa (O)</li> <li>MasterCard (O)</li> </ul>	String (23)

Table 21 Item-Level Fields for RBS WorldPay Atlanta (Continued)

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_code	Product Code	Product code for the item. In the United States, this value is usually a UPC code, part number, or product number. If you do not provide this value, CyberSource uses default.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (12)
item_#_name	Description	Text description of the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (35)
item_#_quantity	Quantity	Number of units of the item purchased. This value must be a whole number. If you do not provide this value, CyberSource uses 1.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	Visa: Numeric (10) MasterCard: Numeric (8)
item_#_tax_amount	Tax Amount	Total tax to apply to the product. This value cannot be negative. If no tax is present, you can send in a value of 0.  The <b>item_#_tax_amount</b> field is additive. For example, if you send one item with <b>item_#_unit_price</b> of 10.00 and <b>item_#_tax_amount</b> of 0.80, and you send another item with <b>item_#_unit_price</b> of 20.00 and <b>item_#_tax_amount</b> of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The <b>item_#_tax_amount</b> and the <b>item_#_unit_price</b> must be in the same currency.	Level II <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul> Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	Numeric (8)
item_#_tax_rate	Tax Rate	Tax rate applied to the item.  Valid range is 0.0001 to 0.9999 (0.01% to 99.99%). The value can also be zero.	Level III <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	Numeric (4)



Table 21 Item-Level Fields for RBS WorldPay Atlanta (Continued)

Secure Acceptance Field Name	RBS WorldPay Atlanta Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax_type_applied	Tax Type	Type of tax being applied to the item. Possible values: <ul style="list-style-type: none"> <li>■ 0000: unknown tax type</li> <li>■ 0001: federal/national sales tax</li> <li>■ 0002: state sales tax</li> <li>■ 0003: city sales tax</li> <li>■ 0004: local sales tax</li> <li>■ 0005: municipal sales tax</li> <li>■ 0006: other tax</li> <li>■ 0010: value-added tax</li> <li>■ 0011: goods and services tax</li> <li>■ 0012: provincial sales tax</li> <li>■ 0013: harmonized sales tax</li> <li>■ 0014: Quebec sales tax (QST)</li> <li>■ 0020: room tax</li> <li>■ 0021: occupancy tax</li> <li>■ 0022: energy tax</li> <li>■ Blank: tax not supported on line item.</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ MasterCard (R)</li> </ul>	String (4)
item_#_total_amount	Line Total	Total purchase amount for the item. Normally calculated as the unit price x quantity.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R. Do not use all zeros or spaces.)</li> </ul>	Numeric (8)
item_#_unit_of_measure	Unit Of Measure	Unit of measure, or unit of measure code, for the item. See <a href="#">Appendix A, "Codes for Units of Measurement,"</a> on page 109.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (12)
item_#_unit_price	Unit Cost	Unit cost of the item purchased. <b>Important</b> For a Level III transaction, this value cannot be zero (0).	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	Visa: Numeric (10) MasterCard: Numeric (8)

# TSYS Acquiring Solutions: Level II and Level III



CyberSource does not presently support Level II processing for the American Express card type on TSYS Acquiring Solutions.

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This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

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Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Processor Specification

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The specification that CyberSource used to implement Level III processing for TSYS Acquiring Solutions (Vital) is *Vital's EIS 1081, Level III Line Item Processing, version 6.4*, April 2004.

The records referenced are:

- Transaction Detail Record — Optional Data; Groups 25, 26, and 27
- Visa Card Non-T&E and Fleet (Non-fuel) Line Item Detail Record
- MasterCard Non-T&E and Fleet (Non-fuel) Line Item Detail Record

## Order-Level Fields

**Table 22** Order-Level Fields for TSYS Acquiring Solutions

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchasing_level	No corresponding TSYS Acquiring Solutions field	Flag that indicates the capture or credit request is for Level III processing. Set to 3.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for captures; not used for credits)</li> <li>■ MasterCard (R for captures; not used for credits)</li> </ul>	String (1)
merchant_vat_registration_number	Merchant VAT Registration Number	Your government-assigned tax identification number.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (20)
purchaser_order_date	Order Date	Date the order was processed. Format: YYMMDD.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (6)
purchaser_vat_registration_number	Customer VAT Registration Number	Customer's government-assigned tax identification number.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (13)
summary_commodity_code	Summary Commodity Code	International description code of the overall order's goods or services. Contact your acquirer for a list of codes.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> </ul>	String (4)

Table 22 Order-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
user_po	No corresponding TSYS Acquiring Solutions field	Value used by your customer to identify the order. This value is typically a purchase order number.	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.)</li> <li>■ MasterCard (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.)</li> </ul>	String (25)
vat_invoice_reference_number	Unique VAT Invoice Reference Number	VAT invoice number associated with the transaction.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (15)
alternate_tax_amount	Alternate Tax Amount	Total amount of alternate tax for the order.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (10)

Table 22 Order-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
alternate_tax_indicator	Alternate Tax Amount Indicator	Flag that indicates whether the alternate tax amount ( <b>alternate_tax_amount</b> ) is included in the request. Possible values: <ul style="list-style-type: none"> <li>0: alternate tax amount is not included in the request.</li> <li>1: alternate tax amount is included in the request.</li> </ul>	Level III <ul style="list-style-type: none"> <li>MasterCard (O)</li> </ul>	String (1)
local_tax_amount	Local Tax	Sales tax for the order.	Level III <ul style="list-style-type: none"> <li>Visa (O)</li> <li>MasterCard (O)</li> </ul>	String (13)
local_tax_indicator	Local Tax Included Flag	Flag that indicates whether local sales tax is included in the order total. Possible values: <ul style="list-style-type: none"> <li>0: local sales tax not included</li> <li>1: local sales tax included</li> <li>2: tax exempt order</li> </ul> <p>If you do not provide this value, CyberSource sets this field to one of the following values:</p> <ul style="list-style-type: none"> <li>0 if you set Local Tax = 0 or do not provide a Local Tax</li> <li>1 if you set Local Tax &gt; 0</li> </ul> <p><b>Important</b> For GSA (General Services Administration) purchasing cards, tax is required in order to qualify for Level III when processing with TSYS Acquiring Solutions. Therefore, the only valid Level III value for this field for GSA cards is 1. If you have any questions or concerns, contact your acquirer.</p>	Level III <ul style="list-style-type: none"> <li>Visa (O)</li> <li>MasterCard (O)</li> </ul>	String (1)
national_tax_amount	National Tax Amount	National tax for the order.	Level III <ul style="list-style-type: none"> <li>Visa (O)</li> <li>MasterCard (O)</li> </ul>	String (13)

Table 22 Order-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
national_tax_indicator	National Tax Included Flag	Flag that indicates whether a national tax is included in the order total. Possible values: <ul style="list-style-type: none"> <li>■ 0: national tax not included</li> <li>■ 1: national tax included</li> </ul> If you do not provide this value, CyberSource sets this field to 1 if you provide a National Tax Amount greater than 0.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (1)
vat_tax_amount	VAT/Tax Amount	Total amount of VAT or other tax included in the order.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (13)
vat_tax_rate	VAT/Tax Rate	Rate of VAT or other tax for the order. <b>Example</b> 0.0400 (=4%)  Valid range: 0.0001 to 0.9999 (0.01% to 99.99%)	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (6)
discount_amount	Discount Amount	Total discount applied to the order. For example: a 20.00 discount off the order total.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> </ul>	String (13)
duty_amount	Duty Amount	Total charges for any import or export duties included in the order.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (13)
freight_amount	Freight Amount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include <b>amount</b> .	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (13)
amount	No corresponding TSYS Acquiring Solutions field	Grand total for the entire capture or credit request.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (15)

Table 22 Order-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_from_postal_code	Ship From Postal/ZIP Code	<p>Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. The postal code must consist of 5 to 9 digits.</p> <p>If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]</p> <p><b>Example</b> A1B 2C4</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (Recommended for best rate. Do not use all zeros or nines.)</li> </ul>	String (10)
ship_to_address_country	Destination Country Code	<p>Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i>.</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (Recommended for best rate)</li> <li>■ MasterCard (O but recommended)</li> </ul>	String (2)
ship_to_address_postal_code	Destination Postal/ZIP Code	<p>Postal code for the shipping address. This is the same as <b>ship_from_postal_code</b> when your customer takes possession of the items at your location. The postal code must consist of 5 to 9 digits.</p> <p>If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits]</p> <p><b>Example</b> 12345-6789</p> <p>If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric]</p> <p><b>Example</b> A1B 2C4</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (Recommended for best rate)</li> <li>■ MasterCard (Recommended for best rate. Do not use all zeros or nines.)</li> </ul>	String (10)

Table 22 Order-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_state	No corresponding TSYS Acquiring Solutions field	State or province of the address to ship the product to. Use the <a href="#">State, Province, and Territory Codes for the United States and Canada</a> .	If any shipping information is in the request, this field is required for CyberSource front-end processing.	String (2)

## Item-Level Fields



**Important**

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3). The total number of line items that Secure Acceptance supports is 200. This number may be different depending on which processor you are using. You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

Table 23 Item-Level Fields for TSYS Acquiring Solutions

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_id	Alternate Tax Identifier	Your tax ID number to use for the alternate tax amount. You must provide this value if you include Alternate Tax Amount in the request. Providing this value is optional if you do not Alternate Tax Amount.	Level III <ul style="list-style-type: none"> <li>MasterCard (See description)</li> </ul>	String (15)
item_#_commodity_code	Item Commodity Code	International description code used to classify the item. Contact your acquirer for a list of codes.	Level III <ul style="list-style-type: none"> <li>Visa (R)</li> </ul>	String (12)
item_#_discount_amount	Visa: Discount Per Line Item MasterCard: Discount Amount	Discount applied to the item.	Level III <ul style="list-style-type: none"> <li>Visa (O)</li> <li>MasterCard (O)</li> </ul>	String (13)



Table 23 Item-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_discount_indicator	Discount Indicator	Flag that indicates whether the amount is discounted. Possible values:  <ul style="list-style-type: none"> <li>■ Y: amount is discounted</li> <li>■ N: amount is not discounted</li> </ul> If you do not provide a value but you set Discount Amount to a value greater than zero, CyberSource sets this field to Y.	Level III  <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (1)
item_#_discount_rate	Item Discount Rate	Rate the item is discounted.  <b>Example</b> 5.25 (=5.25%)	Level III  <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (6)
item_#_gross_net_indicator	Net/Gross Indicator	Flag that indicates whether the tax amount is included in the Line Item Total. Possible values:  <ul style="list-style-type: none"> <li>■ Y: item amount includes tax amount</li> <li>■ N: item amount does not include tax amount</li> </ul>	Level III  <ul style="list-style-type: none"> <li>■ MasterCard (R)</li> </ul>	String (1)
item_#_invoice_number	No corresponding TSYS Acquiring Solutions field	Field to support an invoice number for a transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level III  <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (23)
item_#_code	Product Code	Product code for the item. In the United States, this may be a UPC code, part number, or product number. If you do not provide this value, CyberSource uses default.	Level III  <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (Recommended for best rate. Do not use all zeros or spaces.)</li> </ul>	String (12)
item_#_name	Visa: Item Descriptor  MasterCard: Item Description	Text description of the item.	Level III  <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (R. Do not use all zeros or spaces.)</li> </ul>	String (35)

Table 23 Item-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_quantity	Visa: Quantity  MasterCard: Item Quantity	Number of units of the item purchased. Must be a whole number. If you do not provide this value, CyberSource uses 1.	Level III  <ul style="list-style-type: none"> <li>■ Visa (Recommended for best rate)</li> <li>■ MasterCard (Recommended for best rate. Do not use all zeros or spaces.)</li> </ul>	Integer (12)
item_#_tax_amount	Visa: VAT/Tax Amount  MasterCard: Tax Amount	Total tax to apply to the product. This value cannot be negative.  The <b>item_#_tax_amount</b> field is additive. For example, if you send one item with <b>item_#_unit_price</b> of 10.00 and <b>item_#_tax_amount</b> of 0.80, and you send another item with <b>item_#_unit_price</b> of 20.00 and <b>item_#_tax_amount</b> of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The <b>item_#_tax_amount</b> and the <b>item_#_unit_price</b> must be in the same currency.	Level II  <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul> Level III  <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (13)
item_#_tax_rate	Visa: VAT/Tax Rate  MasterCard: Tax Rate Applied	Tax rate applied to the item.  Valid range is 0.0001 to 0.9999 (0.01% to 99.99%). The value can also be zero.	Level III  <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (R)</li> </ul>	String (6)
item_#_tax_type_applied	Tax Type Applied	Type of tax being applied to the item.	Level III  <ul style="list-style-type: none"> <li>■ MasterCard (O)</li> </ul>	String (4)
item_#_total_amount	Visa: Line Item Total  MasterCard: Extended Item Amount	Total purchase amount for the item. Normally calculated as the unit price x quantity.	Level III  <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R. Do not use all zeros or spaces.)</li> </ul>	Visa: String (13)  MasterCard: String (10)

Table 23 Item-Level Fields for TSYS Acquiring Solutions (Continued)

Secure Acceptance Field Name	TSYS Acquiring Solutions Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_unit_of_measure	Visa: Unit of Measure/Code  MasterCard: Item Unit of Measure	Unit of measure, or unit of measure code, for the item. See <a href="#">Appendix A, "Codes for Units of Measurement," on page 109.</a>	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (R. Do not use all zeros or spaces.)</li> </ul>	String (12)
item_#_unit_price	Unit Cost	Unit cost of the item purchased.  <b>Important</b> For a Level III transaction, this value cannot be zero (0).	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (11)

# Worldpay VAP: Level II and Level III

**Note**

Worldpay VAP was previously called *Little*.

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**Important**

This document provides guidelines based on industry information that indicates which fields are needed to obtain the best interchange rates. CyberSource recommends that you contact your acquirer for the most current information because the card associations can change their requirements at any time.

To qualify for Level III interchange rates for Visa and MasterCard, you need to include at least one item in your request.

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Fields for amounts and tax rates use a string data type. However, you should include only numbers and a decimal point in those fields.

## Order-Level Fields

**Table 24 Order-Level Fields for Worldpay VAP**

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
purchasing_level	No corresponding Worldpay VAP field	Flag that indicates the capture or credit request is for Level III processing. Set to 3.	Level III <ul style="list-style-type: none"> <li>■ Visa (R for captures; not used for credits)</li> <li>■ MasterCard (R for captures; not used for credits)</li> </ul>	String (1)
amex_data_taa1 amex_data_taa2 amex_data_taa3 amex_data_taa4	item Description	<p>Four Transaction Advice Addendum fields. These fields are used to display descriptive information about a transaction on your customer's American Express card statement. If you are sending any TAA fields, start with <b>invoiceHeader_amexDataTAA1</b>, then <b>...TAA2</b>, and so on. Skipping a TAA field causes subsequent TAA fields to be ignored.</p> <p>Contact CyberSource Customer Support if you plan to use these fields so that your account can be configured appropriately.</p> <p>If you request a follow-on credit for an American Express Level II capture that included TAA data and if the TAA data is not included in the follow-on credit request, CyberSource uses the TAA data from the capture request.</p>	Level II <ul style="list-style-type: none"> <li>■ American Express (R)</li> </ul>	String (26)
merchant_vat_registration_number	cardAcceptor TaxId	<p>Your government-assigned tax identification number.</p> <p>For Visa, Worldpay VAP uses the value in your Worldpay VAP account.</p>	Level III <ul style="list-style-type: none"> <li>■ Visa (Not used)</li> <li>■ MasterCard (O)</li> </ul>	String (20)
purchaser_order_date	orderDate	Date the order was processed. If this value is not included in the request, CyberSource uses today's date. Format: YYYY-MM-DD.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (10)

Table 24 Order-Level Fields for Worldpay VAP (Continued)

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
tax_indicator	taxExempt	<p>Flag that indicates whether the order is taxable.</p> <p>This value is:</p> <ul style="list-style-type: none"> <li>■ Required if the sum of all <b>item_#_taxAmount</b> values = 0.</li> <li>■ Optional if the sum of all <b>item_#_taxAmount</b> values &gt; 0.</li> </ul> <p>Possible values:</p> <ul style="list-style-type: none"> <li>■ Y: the order is taxable.</li> <li>■ N: the order is not taxable.</li> </ul>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (See description)</li> <li>■ MasterCard (See description)</li> <li>■ American Express (See description)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (See description)</li> <li>■ MasterCard (See description)</li> </ul>	String (5)
user_po	customer Reference	Value used by your customer to identify the order. This value is typically a purchase order number.	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> <li>■ American Express (R)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (O)</li> </ul>	String (17)
vat_invoice_reference_number	invoice Reference Number	Invoice number associated with the transaction.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (Not used)</li> </ul>	String (15)
discount_amount	discount Amount	Total discount applied to the order.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (O)</li> </ul>	String (8)
duty_amount	dutyAmount	Total charges for any import or export duties included in the order.	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (O)</li> </ul>	String (8)

Table 24 Order-Level Fields for Worldpay VAP (Continued)

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
freight_amount	shippingAmount	Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include <b>purchaseTotals_grandTotalAmount</b> .	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (O)</li> </ul>	String (8)
ship_from_postal_code	shipFromPostalCode	Postal code for the address from which the goods are shipped, which is used to determine nexus. The default is the postal code associated with your CyberSource account. CyberSource recommends that this value not exceed 10 characters.  If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789  If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space][numeric][alpha][numeric] <b>Example</b> A1B 2C4	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (20)
ship_to_address_country	destinationCountryCode	Country to ship the product to. Use the two-character <i>ISO Standard Country Codes</i> . If this value is not included in the request, CyberSource uses the <b>billTo_country</b> value from the authorization request.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (3)

Table 24 Order-Level Fields for Worldpay VAP (Continued)

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_postal_code	destination PostalCode	<p>Postal code for the shipping address. This is the same as <b>shipFrom_postalCode</b> when your customer takes possession of the items at your location. CyberSource recommends that this value not exceed 10 characters. If this value is not included in the request, CyberSource uses the <b>billTo_postalCode</b> value from the authorization request.</p> <p>If the shipping country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] <b>Example</b> 12345-6789</p> <p>If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] <b>Example</b> A1B 2C4</p>	<p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (20)



## Item-Level Fields



### Important

When you include the item-level fields in your request, you must include the **line\_item\_count** field (string 3).

The maximum number of items you can include in a request is:

- American Express Level II: 4 items
- MasterCard Level III: 99 items
- Visa Level III: 99 items

You must populate the **amount** field to equal the total cost of each line item, including the tax amount.

**Table 25** Item-Level Fields for Worldpay VAP

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_amount	taxAmount	Amount collected for a special type of tax.	Level III <ul style="list-style-type: none"> <li>■ Visa (Not used)</li> <li>■ MasterCard (O)</li> </ul>	String (8)
item_#_alternate_tax_id	cardAcceptorTaxId	Your tax ID number to use for the alternate tax amount.	Level III <ul style="list-style-type: none"> <li>■ Visa (Not used)</li> <li>■ MasterCard (O)</li> </ul>	String (20)
item_#_alternate_tax_rate	taxRate	Tax rate for the special tax.	Level III <ul style="list-style-type: none"> <li>■ Visa (Not used)</li> <li>■ MasterCard (O)</li> </ul>	String (5)

Table 25 Item-Level Fields for Worldpay VAP (Continued)

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_alternate_tax_type	taxType Identifier	Flag that indicates the type of tax collected for <b>item_#_alternate_tax_amount</b> . Possible values: <ul style="list-style-type: none"> <li>■ 00 : unknown</li> <li>■ 01 : federal or national sales tax</li> <li>■ 02 : states sales tax</li> <li>■ 03 : city sales tax</li> <li>■ 04 : local sales tax</li> <li>■ 05 : municipal sales tax</li> <li>■ 06 : other tax</li> <li>■ 10 : value-added tax (VAT)</li> <li>■ 11 : goods and services tax (GST)</li> <li>■ 12 : provincial sales tax</li> <li>■ 13 : harmonized sales tax</li> <li>■ 14 : Quebec sales tax</li> <li>■ 20 : room tax</li> <li>■ 21 : occupancy tax</li> <li>■ 22 : energy tax</li> </ul>	Level III <ul style="list-style-type: none"> <li>■ Visa (Not used)</li> <li>■ MasterCard (O)</li> </ul>	String (2)
item_#_commodity_code	commodity Code	International description code used to classify the item. Contact your acquirer for a list of codes.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (O)</li> </ul>	String (12)
item_#_discount_amount	itemDiscount Amount	Discount applied to the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (O)</li> </ul>	String (8)
item_#_invoice_number	No corresponding Worldpay VAP field	Invoice number for the transaction. You must specify the number of line items that will include an invoice number. By default, the first line item will include an invoice number field. The invoice number field can be included for up to 10 line items.	Level III <ul style="list-style-type: none"> <li>■ Visa (O)</li> <li>■ MasterCard (O)</li> </ul>	String (23)
item_#_code	productCode	Product code for the item. In the United States, this may be a UPC code, part number, or product number.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (12)

Table 25 Item-Level Fields for Worldpay VAP (Continued)

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_name	item Description	Text description of the item.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (26)
item_#_quantity	quantity	Number of units of the item purchased. Must be a whole number.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	Integer (9)
item_#_tax_amount	taxAmount	<p>Total tax to apply to the product. This value cannot be negative.</p> <p>The <b>item_#_tax_amount</b> field is additive. For example, if you send one item with <b>item_#_unit_price</b> of 10.00 and <b>taxAmount</b> of 0.80, and you send another item with <b>item_#_unit_price</b> of 20.00 and <b>item_#_tax_amount</b> of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The <b>item_#_tax_amount</b> and the <b>item_#_unit_price</b> must be in the same currency.</p> <p>For Level II, if you do not include this field in your request, CyberSource sets this field to the default value of 0.</p>	<p>Level II</p> <ul style="list-style-type: none"> <li>■ Visa (R for the best rate for corporate cards; R if <b>tax_indicator</b>= Y; otherwise, O.)</li> <li>■ MasterCard (R for the best rate for corporate cards; R if <b>tax_indicator</b> = Y; otherwise, O.)</li> <li>■ American Express (R for the best rate for corporate cards; R if <b>tax_indicator</b> = Y; otherwise, O.)</li> </ul> <p>Level III</p> <ul style="list-style-type: none"> <li>■ Visa (R for the best rate for corporate cards; R if <b>tax_indicator</b> = Y; otherwise, O.)</li> <li>■ MasterCard (R for the best rate for corporate cards; R if <b>tax_indicator</b> = Y; otherwise, O.)</li> </ul>	String (8)

Table 25 Item-Level Fields for Worldpay VAP (Continued)

Secure Acceptance Field Name	Worldpay VAP Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_total_amount	lineItemTotal	Total purchase amount for the item. Normally calculated as the unit price x quantity.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (8)
item_#_unit_of_measure	unitOfMeasure	Unit of measure, or unit of measure code, for the item. See <a href="#">Appendix A, "Codes for Units of Measurement,"</a> on page 109.	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (R)</li> </ul>	String (12)
item_#_unitPrice	unitCost	Unit cost of the item.  <b>Important</b> For a Level III transaction, this value cannot be zero (0).	Level III <ul style="list-style-type: none"> <li>■ Visa (R)</li> <li>■ MasterCard (O)</li> </ul>	String (12)

# Codes for Units of Measurement

The following table lists the codes for units of measurement used in international trade.

**Table 26 Codes for Units of Measurement**

<b>Value</b>	<b>Description</b>
EA	Unknown unit of measure
ACR	Acre (4840 yd <sup>2</sup> )
AMH	Ampere-hour (3.6 kC)
AMP	Ampere
ANN	Year
APZ	Ounce GB, US (31.10348 g) (tr oz.)
ARE	Are (100 m <sup>2</sup> )
ASM	Alcoholic strength mass
ASV	Alcoholic strength by volume
ATM	Standard atmosphere (101325 Pa)
ATT	Technical atmosphere (98066.5 Pa)
BAR	Bar
BFT	Board foot
BG	Unknown unit of measure
BHP	Brake horsepower (745.7 W)
BHX	Hundred boxes
BIL	Billion Eur (trillion US)
BLD	Dry barrel (115.627 dm <sup>3</sup> )
BLL	Barrel
BQL	Becquerel
BTU	British thermal unit (1.055 Kilojoules)
BUA	Bushel (35.2391 dm <sup>3</sup> )
BUI	Bushel (36.36874 dm <sup>3</sup> )
BX	Unknown unit of measure
C	Unknown unit of measure
CA	Unknown unit of measure

**Table 26 Codes for Units of Measurement (Continued)**

<b>Value</b>	<b>Description</b>
CCT	Carrying capacity in metric tons
CD	Unknown unit of measure
CDL	Candela
CEL	Celsius degrees
CEN	Hundred
CGM	Centigram
CKG	Coulomb per kg
CLF	Hundred leaves
CLT	Centiliter
CMK	Square centimeter
CMT	Centimeter
CNP	Hundred packs
CNT	Cental GB (45.359237 kg)
COU	Coulomb
CS	Unknown unit of measure
CTM	Metric carat (200 Mg = 2.10 <sup>-4</sup> kg)
CUR	Curie
CWA	Hundredweight US (45.3592 kg)
D	Unknown unit of measure
DAA	Decare
DAD	Ten days
DAY	Day
DEC	Decade (10 years)
DLT	Deciliter
DMK	Square decimeter
DMQ	Cubic decimeter
DMT	Decimeter
DPC	Dozen pieces
DPT	Displacement tonnage
DRA	Dram US (3.887935 g)
DRI	Dram GB (1.771745 g)
DRL	Dozen rolls
DRM	Drachm gm (3.887935 g)
DTH	Hectokilogram
DTN	Centner / Quintal, metric (100 kg) (decitonne)

**Table 26 Codes for Units of Measurement (Continued)**

<b>Value</b>	<b>Description</b>
DWT	Pennyweight GB, US (1.555174 g)
DZ	Unknown unit of measure
DZN	Dozen
DZP	Dozen packs
DZR	Dozen pairs
EA	Unknown unit of measure
EAC	Each
FAH	Fahrenheit degrees
FAR	Farad
FOT	Foot (.3048 m)
FT	Unknown unit of measure
FTK	Square foot
FTQ	Cubic foot
G	Unknown unit of measure
GAL	Unknown unit of measure
GBQ	Gigabequerel
GFI	Gram of fissile isotopes
GGR	Great gross (12 gross)
GIA	Gill (11.8294 cm <sup>3</sup> )
GII	Gill (0.142065 dm <sup>3</sup> )
GLD	Dry gallon (4.404884 dm <sup>3</sup> )
GLI	Gallon (4.546092 dm <sup>3</sup> )
GLL	Liquid gallon (3.78541 dm <sup>3</sup> )
GRM	Gram
GRN	Grain GB, US (64.798910 mg)
GRO	Gross
GRT	Gross (Register) ton
GWH	Gigawatt-hour (1 Million kWh)
HAR	Hectare
HBA	Hectobar
HGM	Hectogram
HIU	Hundred international units
HLT	Hectoliter
HMQ	Million cubic meters
HMT	Hectometer

**Table 26 Codes for Units of Measurement (Continued)**

<b>Value</b>	<b>Description</b>
HPA	Hectoliter of pure alcohol
HTZ	Hertz
HUR	Hour
INH	Inch (25.4 mm)
INK	Square inch
INQ	Cubic inch
ITM	Item
JOU	Joule
KBA	Kilobar
KEL	Kelvin
KGM	Kilogram
KGS	Kilogram per second
KHZ	Kilohertz
KJO	Kilojoule
KMH	Kilometer per hour
KMK	Square kilometer
KMQ	Kilogram per cubic meter
KMT	Kilometer
KNI	Kilogram of nitrogen
KNS	Kilogram of named substance
KNT	Knot (1 nautical mile per hour)
KPA	Kilopascal
KPH	Kilogram of caustic potash (kilogram of potassium hydroxide)
KPO	Kilogram of potassium oxide
KPP	Kilogram of phosphoric anhydride (kilogram of phosphoric pentoxide)
KSD	Kilogram of substance 90% dry
KSH	Kilogram of caustic soda
KTN	Kilotonne
KUR	Kilogram of uranium
KVA	Kilovolt-ampere
KVR	Kilovar
KVT	Kilovolt
KWH	Kilowatt-hour



**Table 26 Codes for Units of Measurement (Continued)**

<b>Value</b>	<b>Description</b>
KWT	Kilowatt
LBR	Pound GB, US (0.45359237 kg)
LBS	Unknown unit of measure
LBT	Troy pound, US (373.242 g)
LEF	Leaf
LPA	Liter of pure alcohol
LTN	Long ton GB, US (1.0160469 T)
LTR	Liter (1 dm <sup>3</sup> )
LUM	Lumen
LUX	Lux
MAL	Megaliter
MAM	Megameter
MAW	Megawatt
MBE	Thousand standard brick equivalent
MBF	Thousand board-feet (2.36 m <sup>3</sup> )
MBR	Millibar
MCU	Millicurie
MGM	Milligram
MHZ	Megahertz
MIK	Square mile
MIL	Thousand
MIN	Minute
MIO	Million
MIU	Million international units
MLD	Billion US (milliard)
MLT	Milliliter
MMK	Square millimeter
MMQ	Cubic millimeter
MMT	Millimeter
MON	Month
MPA	Megapascal
MQH	Cubic meter per hour
MQS	Cubic meter per second
MSK	Meter per second squared
MTK	Square meter

**Table 26 Codes for Units of Measurement (Continued)**

<b>Value</b>	<b>Description</b>
MTQ	Cubic meter
MTR	Meter
MTS	Meter per second
MVA	Megavolt-ampere (1000 kva)
MWH	Megawatt-hour (1000 kWh)
NAR	Number of articles
NBB	Number of bobbins
NCL	Number of cells
NEW	Newton
NIU	Number of international units
NMB	Number
NMI	Nautical mile (1852 m)
NMP	Number of packs
NMR	Number of pairs
NPL	Number of parcels
NPT	Number of parts
NRL	Number of rolls
NTT	Net (register) ton
OHM	Ohm
ONZ	Ounce GB, US (28.349523 g)
OZA	Fluid ounce (29.5735 cm <sup>3</sup> )
OZI	Fluid ounce (28.413 cm <sup>3</sup> )
PAL	Pascal
PCB	Piece
PCE	Unknown unit of measure
PER	Unknown unit of measure
PGL	Proof gallon
PK	Unknown unit of measure
PTD	Dry pint (0.55061 dm <sup>3</sup> )
PTI	Pint (0.568262 dm <sup>3</sup> )
PTL	Liquid pint (0.473176 dm <sup>3</sup> )
QAN	Quarter (of a year)
QTD	Dry quart (1.101221 dm <sup>3</sup> )
QTI	Quart (1.136523 dm <sup>3</sup> )
QTL	Liquid quart (0.946353 dm <sup>3</sup> )

**Table 26 Codes for Units of Measurement (Continued)**

<b>Value</b>	<b>Description</b>
QTR	Quarter, GB (12.700586 kg)
RL	Unknown unit of measure
RM	Unknown unit of measure
RPM	Revolution per minute
RPS	Revolution per second
SAN	Half year (6 months)
SCO	Score
SCR	Scruple GB, US (1.295982 g)
SEC	Second
SET	Set
SHT	Shipping ton
SIE	Siemens
SMI	(Statute) mile (1609.344 m)
SST	Short Standard (7200 matches)
ST	Unknown unit of measure
STI	Stone GB (6.350293 kg)
STN	Short ton GB, US (0.90718474 T)
TAH	Thousand ampere-hour
TNE	Metric ton (1000 kg) (tonne (1000 kg))
TPR	Ten pairs
TQD	Thousand cubic meters per day
TRL	Trillion EUR
TSD	Tonne of substance 90% dry
TSH	Ton of steam per hour
VLТ	Volt
WCD	Cord (3.63 m <sup>3</sup> )
WEB	Weber
WEE	Week
WHR	Watt-hour
WSD	Standard
WTT	Watt
YDK	Square yard
YDQ	Cubic yard
YRD	Yard (0.9144 m)