

Level II and Level III Processing Using Secure Acceptance

**Supplement to *Secure Acceptance Web/Mobile* and
*Secure Acceptance Silent Order POST***

February 2017

CyberSource[®]
the power of payment

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Recent Revisions to This Document

| Release | Changes |
|----------------|--|
| February 2017 | Updated the “Supported Acquirers” section for the CyberSource through VisaNet processor. See page 26 . |
| September 2016 | <ul style="list-style-type: none"> ■ All processors that support Level III transactions: updated description for item_#_unit_price field to specify that the value cannot be zero (0) for a Level III transaction. ■ All processors: updated description for item_#_product_coder field to specify when the field is required. ■ FDC Compass: updated requirements for item_#_commodity_code. See “Item-Level Fields,” page 35. ■ GPN: updated Level III requirements for the following item-level fields: item_#_commodity_code, item_#_discount_amount, item_#_discount_rate, item_#_product_code, item_#_quantity, item_#_unit_of_measure, item_#_unit_price. See “Item-Level Fields,” page 61. ■ OmniPay Direct: added chapter for this processor. See “OmniPay Direct: Level II and Level III,” page 73. |
| January 2015 | <ul style="list-style-type: none"> ■ Added a note to the “About Level II and Level III Data” section. See page 11. |
| December 2014 | <ul style="list-style-type: none"> ■ Updated the note regarding the line_item_count field for each processor. ■ Updated the “Supported Acquirers” section for the CyberSource through VisaNet processor. See page 26. |
| October 2014 | Updated the line_item_count field in the “Item-Level Field” section for each processor. |
| September 2014 | Added a note regarding the level_3_indicator field. See page 11 . |

About This Guide

Audience and Purpose

This guide is written for application developers who want to integrate credit card processing with Level II or Level III data into Secure Acceptance Web/Mobile or Secure Acceptance Silent Order POST.

Implementing Secure Acceptance Web/Mobile or Secure Acceptance Silent Order POST 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

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

Related Documentation

- *Secure Acceptance Web/Mobile Configuration Guide* ([PDF](#) | [HTML](#))—describes how to create a Secure Acceptance profile and integrate seamlessly with Secure Acceptance Web/Mobile for processing transactions.
- *Secure Acceptance Silent Order POST Development Guide* ([PDF](#) | [HTML](#))—describes how to create a Secure Acceptance profile 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

Customer Support

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 Silent Order POST Development Guide](#) and the [Secure Acceptance Web/Mobile Configuration 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.

Prerequisites

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

| Processor | Level II Card Types Supported | Level III Card Types Supported |
|-----------------------------|--|---------------------------------------|
| 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 |
| Little | Visa MasterCard American Express | Visa MasterCard |
| OmniPay Direct | Visa MasterCard | Visa MasterCard |
| RBS WorldPay Atlanta | Visa MasterCard | Visa MasterCard |
| TSYS Acquiring Solutions | Visa MasterCard | Visa MasterCard |

About Level II and Level III Data

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.

CyberSource Level II and Level III Data Processing

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

**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.

Level II and level II 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:

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 13](#).
 - Required API fields for a sale request. See the [Secure Acceptance Silent Order POST Development Guide](#) or the [Secure Acceptance Web/Mobile Configuration Guide](#).
-

Requesting a Credit with Level II and Level III Data

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

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 amex_data_taa1 , then ...taa2 , 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 bill_to_surname together should not exceed 37 characters. | Level II <ul style="list-style-type: none"> American Express (O) | 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 bill_to_forename together should not exceed 37 characters. | Level II <ul style="list-style-type: none"> American Express (O) | 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 ship_from_postal_code 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] Example: 12345-6789 If the shipping country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] Example: A1B 2C4 | Level II <ul style="list-style-type: none"> American Express (See description) | 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"> American Express (O) | String (17) |

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 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"> American Express (O) | 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"> American Express (O but recommended) | Nonnegative integer (3) |
| item_#_tax_amount | Total Tax Amount | Total tax to apply to the product. CyberSource adds all the item_#_tax_amount values to calculate the Total Tax Amount that is sent to the processor. The item_#_tax_amount value cannot be negative. This field is additive. For example, if you send one item with unit_price of 10.00 and taxAmount of 0.80, and you send another item with unit_price of 20.00 and tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price values must be in the same currency. | Level II <ul style="list-style-type: none"> American Express (R) | 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"> American Express (O but recommended) | Integer (12) |

Chase Paymentech Solutions: Level II and Level III



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"> 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 <ul style="list-style-type: none"> MasterCard (See description) | String (15) |
| 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 amex_data_taa1, then ...taa2, 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 amex_data_taa1 field is required for Level II transactions for American Express cards for Chase Paymentech Solutions, but the other TAA fields are optional.</p> | Level II <ul style="list-style-type: none"> American Express (See description) | 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"> Visa (R) MasterCard (R) | 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"> Visa (R for Level III interchange) | 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"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange) | 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 amount field. | Level III <ul style="list-style-type: none"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange) | 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"> ■ Visa (R for captures; not used for credits) ■ MasterCard (R for captures; not used for credits) | String (1) |
| ship_from_postal_code | Ship From ZIP/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] Example: 12345-6789 If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] Example: A1B 2C4 | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (R for best rate. Do not use all zeros or nines.) | String (10) |
| 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"> ■ Visa (R for best rate) ■ MasterCard (O but recommended) | String (2) |

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_postal_code | Destination ZIP/Postal Code | <p>Postal code for the shipping address. This is the same as ship_from_postal_code 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] Example: 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] Example: A1B 2C4</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R for best rate) ■ MasterCard (R for best rate. Do not use all zeros or nines.) | 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"> ■ Visa (R for purchase/ procurement cards; otherwise O) ■ MasterCard (R for purchase/ procurement cards; otherwise O) ■ American Express (R for purchase/ procurement cards; otherwise O) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R for purchase/ procurement cards; otherwise O) ■ MasterCard (R for purchase/ procurement cards; otherwise O) | 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"> ■ Visa (O) | String (13) |
| vat_tax_rate | VAT/Tax Rate | <p>Rate of VAT or other tax for the order.</p> <p>Example: 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"> ■ Visa (O) | 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"> ■ Visa (R for Level III interchange) | 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"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange) | 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"> ■ Y: amount is discounted ■ N: amount is not discounted 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"> ■ MasterCard (R for Level III interchange) | 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"> ■ Y: item amount includes tax amount ■ N: item amount does not include tax amount | Level III <ul style="list-style-type: none"> ■ MasterCard (R) | String (1) |

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_#_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"> ■ Visa (O) ■ MasterCard (O) ■ American Express (O) Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.) | String (12) |
| item_#_name | Description | Text description of the item. | Level III <ul style="list-style-type: none"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.) | 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"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.) | 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 item_#_tax_amount field is additive. For example, if you send one item with unit_price of 10.00 and tax_amount of 0.80, and you send another item with unit_price of 20.00 and tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency. | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) ■ American Express (R) Level III <ul style="list-style-type: none"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange) | 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"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange) | 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"> ■ MasterCard (O) | 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"> ■ Visa (R) ■ MasterCard (R. Do not use all zeros or spaces.) | 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 "Codes for Units of Measurement," page 100. | Level III <ul style="list-style-type: none"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange. Must not be all zeros or spaces) | 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. Important For a Level III transaction, this value cannot be zero (0). | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) ■ American Express (R) Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String (13) |

CyberSource through VisaNet: 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.

Supported Acquirers

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

- Absa Bank
- Asia Commercial Bank (ACB)
- Auckland Savings Bank (ASB)
- Australia and New Zealand Banking Group Limited (ANZ)
- Axis Bank Ltd of India
- 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 Singapore LTD
- Commercial Bank of Qatar

- Habib Bank Ltd (HBL)
- HDFC Bank Ltd of India
- I&M Bank
- National Bank of Abu Dhabi (NBAD)
- Overseas Chinese Banking Corp (OCBC)
- Rosbank
- 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 |
|------------------------------|--|--|--|--------------------|
| national_tax_indicator | nationalTax Included | <p>Flag that indicates whether a national tax is included in the order total.</p> <p>Possible values:</p> <ul style="list-style-type: none"> ■ 0: national tax not included ■ 1: national tax included <p>This value must be 1 if the sum of all item_#_national_tax values > 0.</p> <p>If you do not include any item_#_national_tax values in your request, CyberSource does not include national_tax_indicator in the data it sends to the processor.</p> | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (R if the sum of all item_#_national_tax values = 0; otherwise O) ■ MasterCard (R if the sum of all item_#_national_tax values = 0; otherwise O) | 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 |
|------------------------------|--|--|--|---|
| tax_indicator | localTax Included | <p>Flag that indicates whether an order is taxable. Possible values:</p> <ul style="list-style-type: none"> ■ Y: the order is taxable. ■ N: the order is not taxable. <p>This value must be Y if the sum of all item_#_tax_amount values > 0.</p> <p>If you do not include any item_#_tax_amount values in your request, CyberSource does not include tax_indicator in the data it sends to the processor.</p> | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (R if the sum of all item_#_tax_amount values = 0; otherwise O) ■ MasterCard (R if the sum of all item_#_tax_amount values = 0; otherwise O) | String (5) |
| user_po | customer Code | Value that identifies your customer. | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String with letters and numbers only (17) |

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_#_invoice_number | No corresponding CyberSource through VisaNet 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"> ■ Visa (O) ■ MasterCard (O) ■ American Express (O) Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (23) |
| item_#_national_tax | nationalTax Amount | Amount of national tax. This value cannot exceed 999999999999 (twelve 9s). This value cannot be negative. | Level II <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (O) ■ MasterCard (O) | 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 | Unit Cost | Unit cost of the item purchased. Important For a Level III transaction, this value cannot be zero (0). | Level II <ul style="list-style-type: none"> ■ American Express (O) Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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 <ul style="list-style-type: none"> ■ 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 <ul style="list-style-type: none"> ■ 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 amex_data_taa1, then ...taa2, 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 amex_data_taa1 field is required for Level II transactions for American Express cards for FDC Compass, but the other TAA fields are optional.</p> | Level II | String (40) |
| amex_data_taa2 | TAA2 | | <ul style="list-style-type: none"> American Express (See description) | |
| 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"> Visa (R) MasterCard (R) | 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"> Visa (O) | 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"> Visa (O) MasterCard (O) | 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 amount field. | Level III <ul style="list-style-type: none"> Visa (O) MasterCard (O) | 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"> Visa (R for captures; not used for credits) MasterCard (R for captures; not used for credits) | 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] Example: 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] Example: A1B 2C4</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (R for best rate. Do not use all zeros or nines.) | 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"> ■ Visa (R for best rate) ■ MasterCard (O but recommended) | String (2) |
| ship_to_address_postal_code | Destination ZIP/Postal Code | <p>Postal code for the shipping address. This is the same as ship_from_address_postal_code 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] Example: 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] Example: A1B 2C4</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R for best rate) ■ MasterCard (R for best rate. Do not use all zeros or nines.) | 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. | Level II <ul style="list-style-type: none"> ■ Visa (R for purchase/procurement cards; otherwise O) ■ MasterCard (R for purchase/procurement cards; otherwise O) ■ American Express (R for purchase/procurement cards; otherwise O) Level III <ul style="list-style-type: none"> ■ Visa (R for purchase/procurement cards; otherwise O) ■ MasterCard (R for purchase/procurement cards; otherwise O) | String (25) |
| 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"> ■ Visa (O) | String (13) |
| vat_tax_rate | VAT/Tax Rate | Rate of VAT or other tax for the order. Example: 0.040 (=4%) Valid range: 0.01 to 0.99 (1% to 99%, with only whole percentage values accepted; values with additional decimal places will be truncated) | Level III <ul style="list-style-type: none"> ■ Visa (O) | 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"> ■ Visa (R) | 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"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Y: amount is discounted ■ N: amount is not discounted 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"> ■ MasterCard (O) | 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"> ■ Y: item amount includes tax amount ■ N: item amount does not include tax amount | Level III <ul style="list-style-type: none"> ■ MasterCard (R) | 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"> ■ Visa (O) ■ MasterCard (O) ■ American Express (O) Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.) | String (12) |
| item_#_name | Description | Text description of the item. | Level III <ul style="list-style-type: none"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.) | 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"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.) | 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 | Total tax to apply to the product. This value cannot be negative. The item_#_tax_amount field is additive. For example, if you send one item with unit_price of 10.00 and tax_amount of 0.80, and you send another item with unit_price of 20.00 and tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency. | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) ■ American Express (R) Level III <ul style="list-style-type: none"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange) | 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"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange) | 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"> ■ MasterCard (O) | 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"> ■ Visa (R) ■ MasterCard (R. Do not use all zeros or spaces.) | 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 "Codes for Units of Measurement," page 100. | Level III <ul style="list-style-type: none"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange. Must not be all zeros or spaces) | Visa: String (12) MasterCard: String (3) |

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. Important For a Level III transaction, this value cannot be zero (0). | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) ■ American Express (R) Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String (13) |

FDC Nashville Global: Level II and Level III



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.



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.

Processor Specification

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 (item_#_tax_amount) and national tax (item_#_national_tax) included in the total tax. | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (R for non-U.S. transactions; otherwise, not used) ■ MasterCard (R for non-U.S. transactions; otherwise, not used) ■ American Express (R for non-U.S. transactions; otherwise, not used) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O for non-U.S. transactions; otherwise, not used) ■ MasterCard (O for non-U.S. transactions; otherwise, not used) | 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 (alternate_tax_amount) is included in the request. Possible values: <ul style="list-style-type: none"> ■ 0: alternate tax amount is not included in the request. ■ 1: alternate tax amount is included in the request. | Level II <ul style="list-style-type: none"> ■ MasterCard (R for non-U.S. MasterCard transactions; otherwise, not used) Level III <ul style="list-style-type: none"> ■ MasterCard (O for non-U.S. MasterCard transactions; otherwise, not used) | String (1) |
| amount | No corresponding FDC Nashville Global field | Grand total for the entire capture or credit request. | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | 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. | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (O) Level III <ul style="list-style-type: none"> ■ Visa (O) | String (11) |
| duty_amount | 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"> ■ Visa (R) ■ MasterCard (O) Level III <ul style="list-style-type: none"> ■ Visa (O) | 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 amount field. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (R for non-U.S. Visa transactions; otherwise, not used) | 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"> ■ Visa (R for captures; not used for credits) ■ MasterCard (R for captures; not used for credits) | String (1) |
| ship_from_postal_code | Ship From Zip | <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] Example: 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] Example: A1B 2C4</p> | Level II <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | 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>Note If you include the ship_to_address_country field in a request and if the ship-to country is the U.S. or Canada, the request must also include the ship_to_address_state field.</p> | <p>Level II</p> <ul style="list-style-type: none"> ■ MasterCard (R) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R if purchase Totals_freight Amount is included; otherwise, recommended for best rate) ■ MasterCard (O but recommended) | String (2) |
| ship_to_address_postal_code | Destination Zip | <p>Postal code for the shipping address. This is the same as ship_to_address_postal_code 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] Example: 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] Example: 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"> ■ Visa (R) ■ MasterCard (R) ■ American Express (R) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | 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 State, Province, and Territory Codes for the United States and Canada.</p> <p>This field must be included in a request if the ship_to_address_country 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"> ■ MasterCard (R) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (See description) ■ MasterCard (See description) | String (2) |
| supplier_order_reference | Item Description Part A | <p>Text description of the item.</p> <p>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.</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R for reduced interchange) | 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 reference_number 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"> ■ Visa (See description) ■ MasterCard (See description) ■ American Express (See description) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (See description) ■ MasterCard (See description) | 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"> ■ Visa (R for non-U.S. Visa transactions; otherwise, not used) | 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"> ■ Visa (O for non-U.S. Visa transactions; otherwise, not used) ■ MasterCard (O for non-U.S. Visa transactions; otherwise, not used) ■ American Express (O for non-U.S. Visa transactions; otherwise, not used) | String (11) |
| vat_tax_rate | VAT/Tax Rate | Vat tax rate for freight or shipping. | Level II <ul style="list-style-type: none"> ■ Visa (O for non-U.S. transactions; otherwise, not used) ■ MasterCard (O for non-U.S. transactions; otherwise, not used) ■ American Express (O for non-U.S. transactions; otherwise, not used) | String (5) |

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 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>Important For MasterCard, do not set this field to 0 (zero).</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ MasterCard (R if item_#_alternate_tax_amount is included; otherwise O) | 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"> ■ Visa (O) ■ MasterCard (O) | 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 item_#_alternate_tax_amount . Possible values: <ul style="list-style-type: none"> ■ 00 : unknown ■ 01 : federal or national sales tax ■ 02 : states sales tax ■ 03 : city sales tax ■ 04 : local sales tax ■ 05 : municipal sales tax ■ 06 : other tax ■ 10 : value-added tax (VAT) ■ 11 : goods and services tax (GST) ■ 12 : provincial sales tax ■ 20 : room tax ■ 21 : occupancy tax ■ 22 : energy tax | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (R) ■ MasterCard (R for reduced interchange) | 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"> ■ Visa (R) ■ MasterCard (O) | String (12) |
| item_#_discount_amount | Item Discount Amount | Discount applied to the item. Important For MasterCard, do not set this field to 0 (zero). | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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. | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (See description) ■ MasterCard (See description) ■ American Express (See description) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (See description) ■ MasterCard (See description) | String (23) |
| item_#_local_tax | Item Local Tax Amount | Sales tax applied to the item. Important For MasterCard, do not set this field to 0 (zero). | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (13) |
| item_#_name | Description | Text description of the item. | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R for Level III interchange) ■ MasterCard (R for Level III interchange. Do not use all zeros or spaces.) | <p>Visa: String (26)</p> <p>MasterCard: String (35)</p> |
| 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 national_tax value differs from the tax_amount value. If you do not provide this value, CyberSource assumes that national_tax is equal to tax_amount . Important For MasterCard, do not set this field to 0 (zero). | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (R for non-U.S. Visa transactions; otherwise, not used) | 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. | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (RS for reduced interchange) | 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 | Identification code for the product. This field is required when item_#_code is not default or one of the values related to shipping and/or handling. | Level III <ul style="list-style-type: none"> ■ Visa (See description) ■ MasterCard (See description) | 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> <p>1 You include the following items in your request:</p> <pre> item_0_unit_price=10.00 item_0_quantity=1 item_0_tax_amount=0.80 item_1_unit_price=20.00 item_1_quantity=1 item_1_tax_amount=1.60 </pre> <p>2 The total amount authorized will be 32.40, not 30.00 with 2.40 of tax included.</p> <p>Note This value is the sales tax. For Visa transactions, this value must be between 0.1% and 22% of the total sale.</p> <p>Note For Visa and American Express, if this value is 0 (zero), the order is tax exempt.</p> <p>Important For MasterCard, do not set this field to 0 (zero).</p> | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) ■ American Express (R) | Visa & MasterCard: String (11) American Express: String (9) |

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 "Codes for Units of Measurement," page 100. | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R for reduced interchange) | String (12) |
| item_#_unit_price | Item Unit Cost | Unit cost of the item purchased. Important For a Level III transaction, this value cannot be zero (0). Important For MasterCard, do not set this field to 0 (zero). | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) ■ American Express (R) Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | 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] Example: 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] Example: 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"> ■ Visa ■ MasterCard | 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"> Y: the order is taxable. N: the order is not taxable. | Level II <ul style="list-style-type: none"> Visa MasterCard | 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"> Visa (R for purchase/procurement cards; otherwise O) MasterCard (R for purchase/procurement cards; otherwise O) | 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"> Visa (O) MasterCard (O) | String (23) |
| item_#_unit_price | Unit cost of the item purchased. | Level II <ul style="list-style-type: none"> Visa (R) MasterCard (R) | 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"> ■ Visa (R for purchase/procurement cards; otherwise O) | 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"> ■ Visa | String (13) |
| summary_commodity_code | Categorizes purchases for VAT reporting. | Level II <ul style="list-style-type: none"> ■ Visa | String (4) |
| tax_indicator | Flag that indicates whether an order is taxable. Possible values: <ul style="list-style-type: none"> ■ Y: the order is taxable. ■ N: the order is not taxable. | Level II <ul style="list-style-type: none"> ■ Visa ■ MasterCard | 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"> ■ Visa (R for purchase/procurement cards; otherwise O) ■ MasterCard (R for purchase/procurement cards; otherwise O) | 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"> ■ MasterCard | 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] Example: 12345-6789 If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] Example: A1B 2C4 | Level II <ul style="list-style-type: none"> ■ MasterCard | 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"> ■ MasterCard | 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] Example: 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] Example: 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"> ■ MasterCard (R for purchase/procurement cards; otherwise O) | 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. | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (23) |

Table 15 Item-Level Fields for FDMS South (Continued)

| Secure Acceptance Field Name | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|------------------------------|--|---|--------------------|
| 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 item_#_national_tax differs from item_#_tax_amount . If you do not provide this value, CyberSource assumes that item_#_national_tax is equal to item_#_tax_amount . | Level II <ul style="list-style-type: none"> ■ Visa ■ MasterCard | String (15) |
| item_#_tax_amount | Total tax to apply to the product. This value cannot be negative. The item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_price of 10.00 and item_#_tax_amount of 0.80, and you send another item with item_#_unit_price of 20.00 and item_#_tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency. | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String (15) |
| item_#_unit_price | Unit cost of the item purchased. | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String (15) |
| item_#_vat_rate | Rate used to calculate VAT. | Level II <ul style="list-style-type: none"> ■ Visa ■ MasterCard | 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 |
|------------------------------|----------------------------|--|--|--------------------|
| 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"> ■ Visa (R for captures; not used for credits) ■ MasterCard (R for captures; not used for credits) | 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 |
|-----------------------------------|--|--|---|--|
| merchant_vat_registration_number | Merchant VAT Number | Your government-assigned tax identification number. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (20) |
| purchaser_order_date | Order Date | Date the order was processed. Format: YYMMDD. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (6) |
| purchaser_vat_registration_number | Customer VAT Number | Customer's government-assigned tax identification number. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | Visa: String (15) MasterCard: String (20) |
| 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. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (4) |
| supplier_order_reference | Item Description | Text description of the item. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (R) ■ MasterCard (R) Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | Visa: String (17) MasterCard: String (25) |
| 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"> ■ Visa (O) | String (12) |
| national_tax_amount | National Tax | National tax for the order. Maximum amount is 99,999.99. | Level III <ul style="list-style-type: none"> ■ Visa (O) | String (12) |
| vat_tax_amount | VAT/Tax Amount (Freight/ Shipping) | Tax amount applied to freight / shipping costs. | Level III <ul style="list-style-type: none"> ■ Visa (O) | String (12) |
| vat_tax_rate | VAT/Tax Rate (Freight/ Shipping) | Tax rate applied to freight / shipping costs. Example: 0.040 (=4%) | Level III <ul style="list-style-type: none"> ■ Visa (O) | String (4) |

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 |
|------------------------------|---------------------------|---|---|--------------------|
| 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. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (12) |
| 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"> ■ Visa (O) ■ MasterCard (O) | 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 amount . | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (12) |
| 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. If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] Example: 12345-6789 If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] Example: A1B 2C4 | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (10) |
| 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"> ■ Visa (O) ■ MasterCard (O) | 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 |
|------------------------------|---------------------------------|---|---|--------------------|
| ship_to_address_postal_code | Destination Postal/Zip Code | <p>Postal code for the shipping address. This is the same as shipFrom_postalCode 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] Example: 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] Example: A1B 2C4</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (10) |
| ship_to_address_state | Destination State/Province Code | <p>State or province of the address to ship the product to. Use the State, Province, and Territory Codes for the United States and Canada.</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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 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"> ■ Visa (O) ■ MasterCard (O) | 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. | Level II <ul style="list-style-type: none"> ■ Visa (R for interchange rates) ■ MasterCard (O) Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | Visa: String (12) MasterCard: String (4) |
| item_#_discount_amount | Item Discount | Discount applied to the item. Maximum amount is 99,999.99. | Level III <ul style="list-style-type: none"> ■ Visa (Required for Level III interchange) ■ MasterCard (Required for Level III interchange) | String (12) |
| item_#_discount_rate | Item Discount Rate | Rate the item is discounted. Example: 5.25 (=5.25%) | Level III <ul style="list-style-type: none"> ■ MasterCard (Required for Level III interchange) | 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"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (Required for Level III interchange) ■ MasterCard (Required for Level III interchange) | Integer (12) |
| item_#_tax_amount | Level II: Amount 2 Level III: Tax Amount N | Total tax to apply to the product. This value cannot be negative. The item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_price of 10.00 and item_#_tax_amount of 0.80, and you send another item with item_#_unit_price of 20.00 and item_#_tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency. Maximum amount is 99,999.99. For Level II, if you do not include this field in your request, CyberSource sets this field to the default value of 0. 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. | Level II <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | Level II: String (10) Level III: String (12) |

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"> ■ Visa (Required for Level III interchange) ■ MasterCard (Required for Level III interchange) | String (12) |
| item_#_unit_price | Unit Price | Unit cost of the item purchased. Maximum amount is 99,999.99. Important For a Level III transaction, this value cannot be zero (0). Note For each item that you include in a request, you must include the amount field. | Level II <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) Level III <ul style="list-style-type: none"> ■ Visa (Required for Level III interchange) ■ MasterCard (Required for Level III interchange) | String (10) |

Litle: 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.

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

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 18 Order-Level Fields for Litle

| Secure Acceptance Field Name | Litle Field Name | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|------------------------------|------------------------------|--|--|--------------------|
| purchasing_level | No corresponding Litle 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"> ■ Visa (R for captures; not used for credits) ■ MasterCard (R for captures; not used for credits) | String (1) |

Table 18 Order-Level Fields for Litle (Continued)

| Secure Acceptance Field Name | Litle Field Name | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|--|-----------------------|--|--|--------------------|
| 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 invoiceHeader_amexDataTAA1, then ...TAA2, 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> | <p>Level II</p> <ul style="list-style-type: none"> ■ American Express (R) | String (26) |
| merchant_vat_registration_number | cardAcceptor TaxId | <p>Your government-assigned tax identification number.</p> <p>For Visa, Litle uses the value in your Litle account.</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (Not used) ■ MasterCard (O) | String (20) |
| purchaser_order_date | orderDate | <p>Date the order was processed. If this value is not included in the request, CyberSource uses today's date. Format: YYYY-MM-DD.</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (10) |

Table 18 Order-Level Fields for Litle (Continued)

| Secure Acceptance Field Name | Litle 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"> ■ Required if the sum of all item_#_taxAmount values = 0. ■ Optional if the sum of all item_#_taxAmount values > 0. <p>Possible values:</p> <ul style="list-style-type: none"> ■ Y: the order is taxable. ■ N: the order is not taxable. | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (See description) ■ MasterCard (See description) ■ American Express (See description) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (See description) ■ MasterCard (See description) | 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"> ■ Visa (R) ■ MasterCard (R) ■ American Express (R) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (O) | 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"> ■ Visa (O) ■ MasterCard (Not used) | String (15) |
| discount_amount | discount Amount | Total discount applied to the order. | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (O) | 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"> ■ Visa (R) ■ MasterCard (O) | String (8) |

Table 18 Order-Level Fields for Litle (Continued)

| Secure Acceptance Field Name | Litle Field Name | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|------------------------------|-------------------------|--|--|--------------------|
| freight_amount | shipping Amount | Total freight or shipping and handling charges for the order. When you include this field in your request, you must also include purchaseTotals_grandTotalAmount . | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (O) | String (8) |
| ship_from_postal_code | shipFrom PostalCode | <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. CyberSource recommends that this value not exceed 10 characters.</p> <p>If the billing country is the U.S., the 9-digit postal code must follow this format: [5 digits][dash][4 digits] Example: 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] Example: A1B 2C4</p> | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (20) |
| ship_to_address_country | destination CountryCode | 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 billTo_country value from the authorization request. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (3) |

Table 18 Order-Level Fields for Litle (Continued)

| Secure Acceptance Field Name | Litle 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 shipFrom_postalCode 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 billTo_postalCode 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] Example: 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] Example: A1B 2C4</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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 19 Item-Level Fields for Litle

| Secure Acceptance Field Name | Litle 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"> ■ Visa (Not used) ■ MasterCard (O) | 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"> ■ Visa (Not used) ■ MasterCard (O) | String (20) |
| item_#_alternate_tax_rate | taxRate | Tax rate for the special tax. | Level III <ul style="list-style-type: none"> ■ Visa (Not used) ■ MasterCard (O) | String (5) |

Table 19 Item-Level Fields for Litle (Continued)

| Secure Acceptance Field Name | Litle 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 item_#_alternate_tax_amount . Possible values: <ul style="list-style-type: none"> ■ 00 : unknown ■ 01 : federal or national sales tax ■ 02 : states sales tax ■ 03 : city sales tax ■ 04 : local sales tax ■ 05 : municipal sales tax ■ 06 : other tax ■ 10 : value-added tax (VAT) ■ 11 : goods and services tax (GST) ■ 12 : provincial sales tax ■ 13 : harmonized sales tax ■ 14 : Quebec sales tax ■ 20 : room tax ■ 21 : occupancy tax ■ 22 : energy tax | Level III <ul style="list-style-type: none"> ■ Visa (Not used) ■ MasterCard (O) | 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"> ■ Visa (R) ■ MasterCard (O) | String (12) |
| item_#_discount_amount | itemDiscount Amount | Discount applied to the item. | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (O) | String (8) |
| item_#_invoice_number | No corresponding Litle 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"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (R) ■ MasterCard (R) | String (12) |

Table 19 Item-Level Fields for Litle (Continued)

| Secure Acceptance Field Name | Litle 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"> ■ Visa (R) ■ MasterCard (R) | 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"> ■ Visa (R) ■ MasterCard (R) | Integer (9) |
| item_#_tax_amount | taxAmount | <p>Total tax to apply to the product. This value cannot be negative.</p> <p>The item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_price of 10.00 and taxAmount of 0.80, and you send another item with item_#_unit_price of 20.00 and item_#_tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price 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"> ■ Visa (R for the best rate for corporate cards; R if tax_indicator= Y; otherwise, O.) ■ MasterCard (R for the best rate for corporate cards; R if tax_indicator = Y; otherwise, O.) ■ American Express (R for the best rate for corporate cards; R if tax_indicator = Y; otherwise, O.) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R for the best rate for corporate cards; R if tax_indicator = Y; otherwise, O.) ■ MasterCard (R for the best rate for corporate cards; R if tax_indicator = Y; otherwise, O.) | String (8) |

Table 19 Item-Level Fields for Litle (Continued)

| Secure Acceptance Field Name | Litle 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"> ■ Visa (R) ■ MasterCard (R) | String (8) |
| item_#_unit_of_measure | unitOfMeasure | Unit of measure, or unit of measure code, for the item. See "Codes for Units of Measurement," page 100 . | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String (12) |
| item_#_unit_price | unitCost | Unit cost of the item. Important For a Level III transaction, this value cannot be zero (0). | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (O) | String (12) |

OmniPay Direct: Level II and Level III

**Important**

This document provides guidelines that indicate which fields are needed 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.

**Note**

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

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 OmniPay Direct is *OmniPay 80Byte Electronic File Specifications, version 4.9*, September 2015.

Order-Level Fields

Table 20 Order-Level Fields for OmniPay Direct

| CyberSource Field Name | OmniPay Direct Field Name | Description | Used By: Required (R) or Optional (O) | Data Type & Length |
|-----------------------------------|---|--|--|--------------------|
| 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 "CyberSource Level II and Level III Data Processing," page 11. | Level III <ul style="list-style-type: none"> ■ Visa (R for captures) ■ MasterCard (R for captures) | 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"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) Level III <ul style="list-style-type: none"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) | String (21) |
| purchaser_order_date | Order Date | Date the order was processed. Format: YYMMDD. | Level II <ul style="list-style-type: none"> ■ Visa (O) Level III <ul style="list-style-type: none"> ■ Visa (O) | 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"> ■ Visa (O) Level III <ul style="list-style-type: none"> ■ Visa (O) | String (13) |

Table 20 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 |
|--------------------------|---|--|--|--|
| 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 II <ul style="list-style-type: none"> ■ Visa (R for interchange rates) Level III <ul style="list-style-type: none"> ■ Visa (R for interchange rates) | String (4) |
| supplier_order_reference | Purchase Identifier / Merchant Related Data / Merchant Reference Number | Text description of the item. | Level II <ul style="list-style-type: none"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) Level III <ul style="list-style-type: none"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) | Visa: String (25) MasterCard: String (17) |
| 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"> ■ <code>true</code>: tax is included in total purchase amount and tax is sum of values for all <code>item_#_taxAmount</code> fields. ■ <code>false</code>: tax is not included in total purchase amount. | Level III <ul style="list-style-type: none"> ■ MasterCard (O) | String (5) |

Table 20 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 |
|------------------------|---------------------------------------|---|---|--------------------|
| 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"> ■ Visa (R) ■ MasterCard (R) Level III <ul style="list-style-type: none"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) | String (25) |
| 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"> ■ 0: local sales tax not included ■ 1: local sales tax included ■ 2: tax exempt order | Level III <ul style="list-style-type: none"> ■ Visa (O) | String (1) |
| national_tax_amount | National Tax | National tax for the order. When you include this field in the request, you must also include the item_#_taxAmount field in the request. | Level II <ul style="list-style-type: none"> ■ Visa (R for interchange rates) Level III <ul style="list-style-type: none"> ■ Visa (R for interchange rates) | 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"> ■ 0: national tax not included ■ 1: national tax included | Level II <ul style="list-style-type: none"> ■ Visa (R for interchange rates) Level III <ul style="list-style-type: none"> ■ Visa (R for interchange rates) | String (1) |
| vat_tax_amount | VAT (Amount) | Total amount of VAT or other tax included in the order. | Level III <ul style="list-style-type: none"> ■ Visa (O) | String (12) |

Table 20 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 |
|-------------------------------|----------------------------------|---|---|-------------------------------|
| vat_tax_rate | VAT (Rate) | Rate of VAT or other tax for the order. Example: 0.04 (=4%) Valid range: 0.01 to 0.99 (1% to 99%) | Level III ■ Visa (R for interchange rates) | String (4) |
| discount_amount | Discount Amount / Total Discount | Total discount applied to the order. | Level III ■ Visa (R for interchange rates) ■ MasterCard (R) | String (12) |
| duty_amount | Duty Amount | Total charges for any import or export duties included in the order. | Level II ■ Visa (O) Level III ■ Visa (O) ■ MasterCard (O) | 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 ■ Visa (O) Level III ■ Visa (R for interchange rates) ■ MasterCard (O) | String (12) |
| amount | Line Item Total | Grand total for the entire request. | Level II ■ Visa (R for interchange rates) | String (12) |

Table 20 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"> ■ Visa (O) ■ MasterCard (R for interchange rates) Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (R for interchange rates) | String (12) |
| 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] Example: 12345-6789 When the goods ships from Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha][space][numeric][alpha][numeric] Example: A1B 2C3 | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (10) |
| ship_to_country | Destination Country Code | Country to which the product is shipped. Use the two-character <i>ISO Standard Country Codes</i> . | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (3) |

Table 20 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 shipFrom_postalCode 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] Example: 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] Example: A1B 2C3</p> | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (O) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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 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 21 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"> ■ Visa (O) Level III <ul style="list-style-type: none"> ■ Visa (O) | String (12) |
| item_#_alternate_tax_rate | VAT / Tax Rate (Freight or Shipping) | Rate used to generate the value for the item_#_alternateTaxAmount field. When you include the item_#_alternateTaxAmount and otherTax_nationalTaxAmount fields and do not include the item_#_alternateTaxRate field, CyberSource calculates the rate as otherTax_nationalTaxAmount x 100 / item_#_unitPrice . | Level II <ul style="list-style-type: none"> ■ Visa (R for interchange rates) Level III <ul style="list-style-type: none"> ■ Visa (R for interchange rates) | String (4) |

Table 21 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. | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (R for interchange rates) ■ MasterCard (O) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | <p>Visa: String (12)</p> <p>MasterCard: String (4)</p> |
| item_#_discount_amount | Discount Per Line Item / Discount Amount | Discount applied to the item. | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) | String (12) |
| item_#_discount_indicator | Discount Indicator | <p>Flag that indicates whether the amount is discounted. Possible values:</p> <ul style="list-style-type: none"> ■ Y: amount is discounted ■ N: amount is not discounted | <p>Level III</p> <ul style="list-style-type: none"> ■ MasterCard (O) | String (1) |
| item_#_discount_rate | Item Discount Rate | <p>Rate at which the item is discounted.</p> <p>Example: 0.050 (=5%)</p> <p>Valid range: 0.010 to 0.999 (1% to 99.9%)</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ MasterCard (O) | 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. | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String (12) |

Table 21 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"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) | 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"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) | Visa: Integer (4) MasterCard: Integer (12) |

Table 21 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> <p>1 You include the following items in your request:</p> <pre> item_0_ unitPrice=10.00 item_0_quantity=1 item_0_ taxAmount=0.80 item_1_ unitPrice=20.00 item_1_quantity=1 item_1_ taxAmount=1.60 </pre> <p>2 The total amount authorized will be 32.40, not 30.00 with 2.40 of tax included.</p> <p>If you want to include the tax amount and also request the taxService service, see Tax Calculation Service Using the Simple Order API.</p> | <p>Level II</p> <ul style="list-style-type: none"> ■ Visa (R if otherTax_nationalTaxAmount is included) ■ MasterCard (R for interchange rates) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R if otherTax_nationalTaxAmount is included) ■ MasterCard (R for interchange rates) | String (12) |
| item_#_tax_rate | Tax Rate / Detail Tax Rate | <p>Tax rate applied to the item.</p> <p>Example: 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"> ■ Visa (R for interchange rates) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) | String (4) |

Table 21 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 item_#_totalAmount field. Possible values: <ul style="list-style-type: none"> ■ true: sales tax is included; item_#_totalAmount value must be greater than zero. ■ false: sales tax is not included; item_#_totalAmount value must be zero. | Level III <ul style="list-style-type: none"> ■ MasterCard (O) | 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"> ■ Visa (O) ■ MasterCard (O) Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | 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 "Codes for Units of Measurement," page 100 . | Level III <ul style="list-style-type: none"> ■ Visa (R for interchange rates) | 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. Important For a Level III transaction, this value cannot be zero (0). | Level III <ul style="list-style-type: none"> ■ Visa (R for interchange rates) ■ MasterCard (R for interchange rates) | 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 22 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"> ■ Visa (R for captures; not used for credits) ■ MasterCard (R for captures; not used for credits) | String (1) |

Table 22 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 |
|-------------------------------------|--|---|---|-------------------------------|
| merchant_vat_registration_number | Merchant VAT Number | Your government-assigned tax identification number. | Level III <ul style="list-style-type: none"> ■ Visa (O) | String (20) |
| purchaser_order_date | Order Date | Date the order was processed. Format: YYMMDD. | Level III <ul style="list-style-type: none"> ■ Visa (O) | Numeric (6) |
| purchaser_vat_registration_number | Customer VAT Number | Customer's government-assigned tax identification number. | Level III <ul style="list-style-type: none"> ■ Visa (O) | 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"> ■ Visa (O) | String (4) |
| tax_indicator | Tax Exempt | Flag that indicates whether an order is taxable. Possible values: <ul style="list-style-type: none"> ■ Y: the order is taxable. ■ N: the order is not taxable. | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String (1) |

Table 22 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"> ■ Visa (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) ■ MasterCard (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) ■ MasterCard (R for purchase/ procurement cards; otherwise O. Do not use all zeros or nines.) | 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"> ■ Visa (O) | 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"> ■ Visa (O) ■ MasterCard (O) | String (8) |
| alternate_tax_indicator | Alternate Tax Indicator | <p>Flag that indicates whether the alternate tax amount (alternate_tax_amount) is included in the request. Possible values:</p> <ul style="list-style-type: none"> ■ 0: alternate tax amount is not included in the request. ■ 1: alternate tax amount is included in the request. | <p>Level III</p> <ul style="list-style-type: none"> ■ MasterCard (R) | String (1) |

Table 22 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"> ■ Visa (O) | Numeric (8) |
| vat_tax_rate | Tax Rate | Rate of VAT or other tax for the order. Example: 0.0400 (=4%) Valid range: 0.0001 to 0.9999 (0.01% to 99.99%) | Level III <ul style="list-style-type: none"> ■ Visa (O) | 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"> ■ Visa (O) | 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"> ■ Visa (O) ■ MasterCard (O) | 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 amount . | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | Numeric (8) |
| amount | Amount | Grand total for the entire capture or credit request. | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | 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] Example: 12345-6789 If the billing country is Canada, the 6-digit postal code must follow this format: [alpha][numeric][alpha] [space][numeric][alpha] [numeric] Example: A1B 2C4 | Level III <ul style="list-style-type: none"> ■ Visa (Recommended) ■ MasterCard (Recommended) | String (10) |

Table 22 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 billTo_country value. If you do not provide either of these values, CyberSource uses the default value of US.</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (Recommended for best rate) ■ MasterCard (Recommended for best rate) | 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] Example: 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] Example: 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 III</p> <ul style="list-style-type: none"> ■ Visa (Recommended for best rate) ■ MasterCard (Recommended for best rate) | 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 23 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"> ■ MasterCard (See description) | 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"> ■ Visa (R) | String (12) |
| item_#_discount_amount | Discount Amount | Discount applied to the item. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | Numeric (8) |
| item_#_discount_rate | Discount Rate | Rate the item is discounted. Example: 5.25 (=5.25%) | Level III <ul style="list-style-type: none"> ■ MasterCard (O) | 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"> ■ Y: item amount includes tax amount ■ N: item amount does not include tax amount | Level III <ul style="list-style-type: none"> ■ MasterCard (R) | 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"> ■ Visa (O) ■ MasterCard (O) | String (23) |

Table 23 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"> ■ Visa (R) ■ MasterCard (R) | String (12) |
| item_#_name | Description | Text description of the item. | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | 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"> ■ Visa (R) ■ MasterCard (R) | 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 item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_price of 10.00 and item_#_tax_amount of 0.80, and you send another item with item_#_unit_price of 20.00 and item_#_tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency. | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | 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"> ■ MasterCard (O) | Numeric (4) |

Table 23 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"> ■ 0000: unknown tax type ■ 0001: federal/national sales tax ■ 0002: state sales tax ■ 0003: city sales tax ■ 0004: local sales tax ■ 0005: municipal sales tax ■ 0006: other tax ■ 0010: value-added tax ■ 0011: goods and services tax ■ 0012: provincial sales tax ■ 0013: harmonized sales tax ■ 0014: Quebec sales tax (QST) ■ 0020: room tax ■ 0021: occupancy tax ■ 0022: energy tax ■ Blank: tax not supported on line item. | Level III <ul style="list-style-type: none"> ■ MasterCard (R) | 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"> ■ Visa (R) ■ MasterCard (R. Do not use all zeros or spaces.) | Numeric (8) |
| item_#_unit_of_measure | Unit Of Measure | Unit of measure, or unit of measure code, for the item. See "Codes for Units of Measurement," page 100. | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String (12) |
| item_#_unit_price | Unit Cost | Unit cost of the item purchased. Important For a Level III transaction, this value cannot be zero (0). | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | Visa: Numeric (10) MasterCard: Numeric (8) |

TSYS Acquiring Solutions: Level II and Level III

**Important**

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

**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 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 24 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"> ■ Visa (R for captures; not used for credits) ■ MasterCard (R for captures; not used for credits) | String (1) |
| merchant_vat_registration_number | Merchant VAT Registration Number | Your government-assigned tax identification number. | Level III <ul style="list-style-type: none"> ■ Visa (O) | String (20) |
| purchaser_order_date | Order Date | Date the order was processed. Format: YYMMDD. | Level III <ul style="list-style-type: none"> ■ Visa (O) | 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"> ■ Visa (O) | 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"> ■ Visa (R) | String (4) |

Table 24 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"> ■ Visa (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.) ■ MasterCard (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.) <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.) ■ MasterCard (R for purchase/procurement cards; otherwise O. Do not use all zeros or nines.) | 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"> ■ Visa (O) | 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"> ■ MasterCard (O) | String (10) |

Table 24 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 (alternate_tax_amount) is included in the request. Possible values: <ul style="list-style-type: none"> ■ 0: alternate tax amount is not included in the request. ■ 1: alternate tax amount is included in the request. | Level III <ul style="list-style-type: none"> ■ MasterCard (O) | String (1) |
| local_tax_amount | Local Tax | Sales tax for the order. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ 0: local sales tax not included ■ 1: local sales tax included ■ 2: tax exempt order <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"> ■ 0 if you set Local Tax = 0 or do not provide a Local Tax ■ 1 if you set Local Tax > 0 <p>Important 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"> ■ Visa (O) ■ MasterCard (O) | String (1) |
| national_tax_amount | National Tax Amount | National tax for the order. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | String (13) |

Table 24 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"> ■ 0: national tax not included ■ 1: national tax included 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"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (O) | String (13) |
| vat_tax_rate | VAT/Tax Rate | Rate of VAT or other tax for the order. Example: 0.0400 (=4%) Valid range: 0.0001 to 0.9999 (0.01% to 99.99%) | Level III <ul style="list-style-type: none"> ■ Visa (O) | 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"> ■ Visa (O) | 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"> ■ Visa (O) ■ MasterCard (O) | 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 amount . | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (R) ■ MasterCard (R) | String (15) |

Table 24 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] Example: 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] Example: A1B 2C4</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (Recommended for best rate. Do not use all zeros or nines.) | 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"> ■ Visa (Recommended for best rate) ■ MasterCard (O but recommended) | String (2) |
| ship_to_address_postal_code | Destination Postal/ZIP Code | <p>Postal code for the shipping address. This is the same as ship_from_postal_code 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] Example: 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] Example: A1B 2C4</p> | <p>Level III</p> <ul style="list-style-type: none"> ■ Visa (Recommended for best rate) ■ MasterCard (Recommended for best rate. Do not use all zeros or nines.) | String (10) |

Table 24 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 <i>State, Province, and Territory Codes for the United States and Canada</i> . | 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 25 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"> ■ MasterCard (See description) | 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"> ■ Visa (R) | 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"> ■ Visa (O) ■ MasterCard (O) | String (13) |

Table 25 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"> ■ Y: amount is discounted ■ N: amount is not discounted <p>If you do not provide a value but you set Discount Amount to a value greater than zero, CyberSource sets this field to Y.</p> | Level III <ul style="list-style-type: none"> ■ MasterCard (O) | String (1) |
| item_#_discount_rate | Item Discount Rate | Rate the item is discounted. Example: 5.25 (=5.25%) | Level III <ul style="list-style-type: none"> ■ MasterCard (O) | 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"> ■ Y: item amount includes tax amount ■ N: item amount does not include tax amount | Level III <ul style="list-style-type: none"> ■ MasterCard (R) | 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"> ■ Visa (O) ■ MasterCard (O) | 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"> ■ Visa (O) ■ MasterCard (Recommended for best rate. Do not use all zeros or spaces.) | String (12) |
| item_#_name | Visa: Item Descriptor MasterCard: Item Description | Text description of the item. | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (R. Do not use all zeros or spaces.) | String (35) |

Table 25 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"> ■ Visa (Recommended for best rate) ■ MasterCard (Recommended for best rate. Do not use all zeros or spaces.) | 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 item_#_tax_amount field is additive. For example, if you send one item with item_#_unit_price of 10.00 and item_#_tax_amount of 0.80, and you send another item with item_#_unit_price of 20.00 and item_#_tax_amount of 1.60, the total amount authorized will be for 32.40, not 30.00 with 2.40 of tax included. The item_#_tax_amount and the item_#_unit_price must be in the same currency. | Level II <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | 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"> ■ Visa (O) ■ MasterCard (R) | 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"> ■ MasterCard (O) | 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"> ■ Visa (R) ■ MasterCard (R. Do not use all zeros or spaces.) | Visa: String (13) MasterCard: String (10) |

Table 25 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 "Codes for Units of Measurement," page 100 . | Level III <ul style="list-style-type: none"> ■ Visa (O) ■ MasterCard (R. Do not use all zeros or spaces.) | String (12) |
| item_#_unit_price | Unit Cost | Unit cost of the item purchased. Important For a Level III transaction, this value cannot be zero (0). | Level III <ul style="list-style-type: none"> ■ Visa (R) ■ MasterCard (R) | String (11) |

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

| Value | Description |
|--------------|---|
| ACR | Acre (4840 yd ²) |
| AMH | Ampere-hour (3.6 kc) |
| AMP | Ampere |
| ANN | Year |
| APZ | Ounce GB, US (31.10348 G) (Troy Ounce) |
| ARE | Are (100 m ²) |
| 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 horse power (245.7 W) |
| BHX | Hundred boxes |
| BIL | Billion Euro (Trillion USD) |
| BLD | Dry barrel (115.627 dm ³) |
| BLL | Barrel |
| BQL | Becquerel |
| BTU | British thermal unit (1.055 kilojoules) |
| BUA | Bushel (35.2391 dm ³) |
| BUI | Bushel (36.36874 dm ³) |
| BX | Unknown unit of measure |
| C | Unknown unit of measure |
| CA | Unknown unit of measure |
| CCT | Carrying capacity in metric tons |

Table 26 Codes for Units of Measurement (Continued)

| Value | Description |
|--------------|---|
| CD | Unknown unit of measure |
| CDL | Candela |
| CEL | Degrees celsius |
| CEN | Hundred |
| CGM | Centigram |
| CKG | Coulomb per kilogram |
| CLF | Hundred leaves |
| CLT | Centilitre |
| CMK | Square centimetre |
| CMT | Centimetre |
| CNP | Hundred packs |
| CNT | Cental GB (45.359237 kilogram) |
| COU | Coulomb |
| CS | Unknown unit of measure |
| CTM | Metric carat (200 Mg = 2.10 ⁻⁴ kilogram) |
| CUR | Curie |
| CWA | Hundredweight US (45.3592 kilogram) |
| D | Unknown unit of measure |
| DAA | Decare |
| DAD | Ten Days |
| DAY | Day |
| DEC | Decade (10 years) |
| DLT | Decilitre |
| DMK | Square decimetre |
| DMQ | Cubic decimetre |
| DMT | Decimetre |
| 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) |
| DWT | Pennyweight GB, US (1.555174 g) |

Table 26 Codes for Units of Measurement (Continued)

| Value | Description |
|--------------|--|
| DZ | Unknown unit of measure |
| DZN | Dozen |
| DZP | Dozen packs |
| DZR | Dozen pairs |
| EA | Unknown unit of measure |
| EA | Unknown unit of measure |
| EAC | Each |
| FAH | Degrees fahrenheit |
| FAR | Farad |
| FOT | Foot (0.3048 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 ³) |
| GII | Gill (0.142065 dm ³) |
| GLD | Dry gallon (4.404884 dm ³) |
| GLI | Gallon (4.546092 dm ³) |
| GLL | Liquid gallon (3.78541 dm ³) |
| GRM | Gram |
| GRN | Grain GB, US (64.798910 mg) |
| GRO | Gross |
| GRT | Gross (Register) ton |
| GWH | Gigawatt-hour (1 million kw/h) |
| HAR | Hectare |
| HBA | Hectobar |
| HGM | Hectogram |
| HIU | Hundred international units |
| HLT | Hectolitre |
| HMQ | Million cubic metres |
| HMT | Hectometre |

Table 26 Codes for Units of Measurement (Continued)

| Value | Description |
|--------------|---|
| HPA | Hectolitre 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 | Kilogoule |
| KMH | Kilometre per hour |
| KMK | Square kilometre |
| KMQ | Kilogram per cubic meter |
| KMT | Kilometre |
| 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 |
| KWT | Kilowatt |

Table 26 Codes for Units of Measurement (Continued)

| Value | Description |
|--------------|--|
| LBR | Pound GB, US (0.45359237 kg) |
| LBS | Unknown unit of measure |
| LBT | Troy Pound, US (373.242 g) |
| LEF | Leaf |
| LPA | Litre of pure alcohol |
| LTN | Long Ton GB, US (1.0160469 T) |
| LTR | Litre (1 dm ³) |
| LUM | Lumen |
| LUX | Lux |
| MAL | Megalitre |
| MAM | Megametre |
| MAW | Megawatt |
| MBE | Thousand standard brick equivalent |
| MBF | Thousand board-feet (2.36 m ³) |
| 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 | Millilitre |
| MMK | Square millimetre |
| MMQ | Cubic millimetre |
| MMT | Millimetre |
| MON | Month |
| MPA | Megapascal |
| MQH | Cubic metre per hour |
| MQS | Cubic metre per second |
| MSK | Metre per second squared |
| MTK | Square metre |
| MTQ | Cubic metre |

Table 26 Codes for Units of Measurement (Continued)

| Value | Description |
|--------------|---|
| MTR | Metre |
| MTS | Metre per second |
| MVA | Megavolt-ampere (1000 kva) |
| MWH | Megawatt-hour (1000 kw/h) |
| 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 ^{^3}) |
| OZI | Fluid ounce (28.413 cm ^{^3}) |
| 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 ^{^3}) |
| PTI | Pint (0.568262 dm ^{^3}) |
| PTL | Liquid pint (0.473176 dm ^{^3}) |
| QAN | Quarter (of a year) |
| QTD | Dry quart (1.101221 dm ^{^3}) |
| QTI | Quart (1.136523 dm ^{^3}) |
| QTL | Liquid quart (0.946353 dm ^{^3}) |
| QTR | Quarter, GB (12.700586 kg) |

Table 26 Codes for Units of Measurement (Continued)

| Value | Description |
|--------------|--|
| 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 (.90718474 T) |
| TAH | Thousand ampere-hour |
| TNE | Metric Ton (1000 kg) (Tonne (1000 kg)) |
| TPR | Ten pairs |
| TQD | Thousand cubic metres per day |
| TRL | Trillion eur |
| TSD | Tonne of substance 90% dry |
| TSH | Ton of steam per hour |
| VLT | Volt |
| WCD | Cord (3.63 m ³) |
| WEB | Weber |
| WEE | Week |
| WHR | Watt-hour |
| WSD | Standard |
| WTT | Watt |
| YDK | Square yard |
| YDQ | Cubic yard |
| YRD | Yard (0.9144 m) |