Authorize

This command requests a payment authorization at the processor or adds a voice authorization code.

Device UI Required: Yes

Request Packet

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
FUNCTION_TYPE	Required	Static value	N/A	N/A	PAYMENT	Type of function
COMMAND	Required	Static value	N/A	N/A	AUTH	Command name
TRANS_AMOUNT	Required	Floating point number	1(2)	6(2)		Transaction amount. **Example:** 5.00
PAYMENT_TYPE	Optional	List			• CREDIT • GIFT	When present, will bypass the consumer payment selection screen. **NOTE:** PAYMENT_TYPE field is mandatory for card token based transactions.
AUTH_CODE	Conditional	Character	1	6		When present, the authorization is performed offline as a VOICE_AUTH. **NOTE:** This is applicable for Credit card only. **Example:** TA1260
MANUAL_ENTRY	Optional	Binary			• TRUE • FALSE	Instructs Point to collect the account information through the keypad on the device.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
CUSTOMER_STRE ET	Optional	Character	1	20		Applicable when MANUAL_ENTRY = TRUE. CUSTOMER_STRE ET or CUSTOMER_ZIP required for Amex card validation when using FDRC Engage.
CUSTOMER_ZIP	Optional	Character		9		Applicable when MANUAL_ENTRY = TRUE. Merchants should send this field only when required by the processor.
MER_SVC_PHONE _NUM	Optional	Numeric		10		FDRC Engage Only. Customer Service Phone Number for use when CARD_PRESENT= FALSE (will override what is in CustomerSvcPho ne parameter). **Example:** 8001234567

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
CARD_PRESENT	Optional	Binary			• TRUE - Card present (POS Condition Code 71) (Default) • FALSE - Card not present (POS Condition Code 08)	FDRC Engage Only. Card Present Indicator.
ORDER_TYPE	Optional	List			• 1 - Mail Order • 2 - Telephone Order (default)	This is for FDRC Engage Only. Order Type for Card not present (MOTO) transactions (when CARD_PRESENT = FALSE).
RECURRING	Optional	B	1	1	Yes or No	This is for UGP only. This is used when Payment Type is Credit. This field denotes Recurring Billing Flag to indicate the transaction is recurring.
BILLPAY	Optional	Binary	1	1	TRUE or False	This is for UGP and Vantiv Direct. This is used to indicate a bill payment.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
FORCE_FLAG	Conditional	Binary			TRUE or False	This is applicable for FDRC and UGP. This field is used to override duplicate checking (dupcheck) for the transaction.
USER_DEFINED1	Optional	Character	1	35		This is for Vantiv Direct Only. This is a user defined field (will override START session).
USER_DEFINED2	Optional	Character	1	35		This is for Vantiv Direct Only. This is a user defined field (will override START session). **NOTE:** This will be truncated to 20.
USER_DEFINED3	Optional	Character	1	35		This is for Vantiv Direct Only. This is a user defined field (will override START session). **NOTE:** This will be truncated to 20.
COUNTER	Required	Numeric	1	10		COUNTER is used for a given MAC label. Each COUNTER should be higher than the last one. This is sed to authenticate the POS. **Example:** 100

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
MAC	Required	Base64 Encoded Data	N/A	N/A		Message Authentication Code. This is used to authenticate the POS.
MAC_LABEL	Required	Character	1	50		Associated label that tells the device which MAC_KEY to use to decrypt the value of MAC. This is used to authenticate the POS. **Example:** REG1

Level II

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
TAX_AMOUNT	Conditional	Floating point number	1(2)	6(2)		Tax amount. **Example:** 5.00
TAX_IND	Conditional	List			0 – Tax not provided 2 - Tax amount equals 0.00 1 - Tax amount not equal to 0.00	Tax indicator.
CMRCL_FLAG	Conditional	List			- B - Business - C - Corporate - P - Purchasing	Commercial flag.

Keyed Account Information for Gift Card Payment Type Only

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
ACCT_NUM	Optional	Numeric	1	25		Account number. **Example:** 6782345678131 3
CARD_EXP_MONT H	Optional	Numeric	2	2		Card expiry month. **Example:** 12
CARD_EXP_YEAR	Optional	Numeric	2	2		Card expiry year. **Example:** 49
PIN_CODE	Optional	Numeric	1	10		Pin code.
CVV2	Optional	Numeric	1	10		CVV2 number.

Processor-Based Token (Conditional)

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
CARD_TOKEN	Conditional	Character	1	40		Refer to [MESSAGE FORMAT](#) section for more details on Two Way Card Token. **Example:** 7987654321098 765
CARD_EXP_MONT H	Conditional	Numeric	2	2		Required when sending AUTH_CODE and CARD_TOKEN.
CARD_EXP_YEAR	Conditional	Numeric	2	2		Required when sending AUTH_CODE and CARD_TOKEN.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
BANK_USERDATA	Conditional	Character	1	50		Returned with CARD_TOKEN. Whatever comes back with BANK_USERDATA in the response for the token should also be sent in the request. **NOTE:** This is applicable to FDRC Engage only. **Example:** 01/00/02/Visa/
OC_INDUSTRY_CODE	Conditional	Character	1	1	• E - eCommerce • M - Moto. Default is empty.	This is used to convert a transaction from the Merchants default industry of Retail or Restaurant to E-Commerce or MOTO. **NOTE:** Thiis is used only in case of UGP host.

Response Packet

Field	Type	Value	Description
RESPONSE_TEXT	Character		Processor response text. **Example:** SUCCESS / APPROVE
RESULT	Character		This indicates the Result details, commonly APPROVED or DECLINED.
RESULT_CODE	Numeric	Expected result codes: 5 or 6	This indicates the result code.

Field	Type	Value	Description
TERMINATION_STATUS	Character	SUCCESS and FAILURE	This indicates the transaction termination status. This is the overall status of the transaction irrespective of approved or declined. Like, if the output is generated then the status is SUCCESS and if no output is generated then the status will be FAILURE.
COUNTER	Numeric		Echoes COUNTER sent in the request. **Example:** 100
TROUTD	Numeric		STAN number. **Example:** 000042
CTROUTD	Numeric		Client-specific Transaction routing ID. **Example:** 20
PAYMENT_MEDIA	Character		Medium of payment, commonly VISA/MC/DISC/AMEX/DEBIT. **NOTE:** Value returned by device for an offline (SAF) response may differ from online. **Example:** VISA
PAYMENT_TYPE	Character		Type of payment. **Example:** CREDIT, GIFT
ACCT_NUM	Numeric		Masked account number. **Example:** 400555******0019
AUTH_CODE	Character		Processor authorization number. **Example:** TA0156
AVAILABLE_BALANCE	Floating point number		Available balance on card. **Example:** 0.01
APPROVED_AMOUNT	Floating point number		Amount approved on authorization. **Example:** 5.00
CARD_ENTRY_MODE	Character		Refer to Card Entry Mode for details on possible values. **NOTE:** Vantiv Direct also has value Token **Example:** Swiped

Field	Type	Value	Description
CARDHOLDER	Character		Returned for swiped/insert transactions. **Example:** Doe/John
CARD_EXP_MONTH	Numeric		Expiry month of the card. **Example:** 12
CARD_EXP_YEAR	Numeric		Expiry year of the card. **Example:** 20
AVS_CODE	Character		Result of AVS check when sent from host. **Example:** Z
CVV2_CODE	Character		Result of CVV2 check when sent from host. **Example:** M
REFERENCE	Character		Returned by some processors. **Example:** 100007265288
TRACE_CODE	Character		Returned by some processors for tracking purposes. **Example:** 119517
AUTH_RESP_CODE	Character		Processor authorization response code. **Example:** OK0156
RECEIPT_DATA	Character		Refer to Receipt Data in Response section for more details on receipt data.
TRANS_DATE	Character		Transaction date. **Example:** 2018.01.10
TRANS_TIME	Character		Transaction time. **Example:** 12:24:30
TRAINING_MODE	Character	ON or OFF	Conditionally returned when session is in Training Mode.
TRAN_LANG_CODE	Character	• en - English • fr - French • es - Espanol	This field is returned in POS response in case of only payment transactions with card intervention.

Processor-Based Token (Conditional)

Field	Type	Value(s)	Description
CARD_TOKEN	Character		Refer to MESSAGE FORMAT section for more details on Message Format, Responses from Point. **Example:** 7987654321098765
BANK_USERDATA	Character		Bank User Data, normally returned with CARD_TOKEN. **NOTE:** This is applicable for FDRC Engage only. **Example:** 01/00/02/Visa/

Direct to Processor Implementation Response Fields (Conditional)

Field	Type	Value(s)	Description
HOST_RESPCODE	Numeric		Host response code. **Example:** 000
MERCHID	Numeric		Returns the merchant ID.
TERMID	Numeric		Returns the terminal ID.
LANE	Numeric		Lane number.
EMV_CVM	Character	• SIGNATURE • PIN • NONE	**NOTE:** Vantiv Direct returns for both EMV and MSR transactions.

Field	Type	Value(s)	Description
EMV_REVERSAL_TYPE	Numeric	Possible values: • 401-Host Approved but EMV Card Removed Before Completing (auto-voided) • 402-Host Approved but EMV Card Rejected Current Transaction (auto-voided) • 403-Host Approved but Error Occurred before completing Current Transaction (auto-voided)	EMV reversal type.

BANK_USERDATA Information

> **Note**
>
> For FDRC Direct to Processor Implementations, the BANK_USERDATA field is required when submitting keyed account information for GIFT transactions. The BANK_USERDATA field must contain the following /-delimited values:
> `PosEntryMode/PosCondCode/TermEntryCapability/CardType/` , where CardType = Payment Media. **Example:** 01/00/02/Visa/

POS Entry Mode

Part I – Account Number Entry Mode

POS Entry Mode	Description
00	Unspecified

POS Entry Mode	Description
01	Manual (key entered)
03	Barcode
04	OCR (Optical Character Reader)
05	Integrated Circuit Read (CVV data Reliable)
07	Contactless Integrated Circuit Read (Reliable)
08	Amex Digital Wallet
09	MasterCard remote chip entry
10	Credentials on file
79	EMV fallback to manual entry
80	EMV fallback to magnetic stripe entry
82	Contactless Mobile Commerce
90	Magnetic Stripe – Track Read
91	Contactless Magnetic Stripe Read
95	Integrated Circuit Read (CVV data unreliable)

Part II – Electronic/PIN Authentication Capability

POS Entry Mode	Description
0	Unspecified
1	PIN entry capability
2	No PIN entry capability
3	PIN pad inoperative
4	PIN verified by terminal device

POS Condition Code

POS Cond Code	Description

00	Cardholder Present, Card Present
01	Cardholder Present, Unspecified
02	Cardholder Present, Unattended Device
03	Cardholder Present, Suspect Fraud
04	Cardholder Not Present - Recurring
05	Cardholder Present, Card Not Present
06	Cardholder Present, Identity Verified
08	Cardholder Not Present, Mail Order/Telephone Order
09	Cardholder Not Present
59	Cardholder Not Present, Ecommerce
71	Cardholder Present, Magnetic Stripe Could Not be Read
73	Visa recurring transaction

Terminal Entry Capability

POS Entry Mode	Description
00	Unspecified
01	Terminal not used
02	Magnetic stripe only
03	Magnetic stripe and key entry
04	Magnetic stripe, key entry, and chip
05	Barcode
06	Proximity terminal – contactless chip/RFID
07	OCR
08	Chip only
09	Chip and magnetic stripe

POS Entry Mode	Description
10	Manual entry only
11	Proximity terminal – contactless magnetic stripe

Card Type (Payment Media)

Card Type (case-sensitive)

- Visa
- MasterCard
- Amex
- Discover
- JCB
- Diners
- PPayCL