

https://verifone.cloud/docs/sca-functional-specification/protocol_spec/device_transaction/set_parameters

Updated: 23-Jul-2025

SET_PARM

This command is used to set SCA parameters on the payment device. Direct to Processor implementations only. Not supported by TSYS Direct Engage.

Device UI Required: No

Request Packet

Field	Rule	Type	Minimum	Maximum	Value(s)	
FUNCTION_TYPE	Required	Static value	N/A	N/A	DEVICE	Type of function
COMMAND	Required	Static value	N/A	N/A	SET_PARM	Command name.
PARAM	Optional	Character	1			If the user wants to set m parameter should be sepa Example: 1: TIP=PRON GRATUITYPERCENT1
PARM_MID	Optional	Numeric	1	20		Merchant Gateway ID
PARM_TID	Optional	Numeric	1	20		Terminal ID
PARM_LANE	Optional	Numeric	1	20		Lane ID
PARM_HOST_IND	Required	List	1	20	 VNTV (Worldpay) FDRC (FDRC/Fiserv) UGP (UGP) CHHC (Chase) GSC (GSC) 	Host to which the values
PARM_ADMINURL	Optional	Character	1	80		Admin URL
PARM_PRIMURL	Optional	Character	1	80		Primary URL
PARM_SCNDURL	Optional	Character	1	80		Secondary URL
PARM_USERNAME	Optional	Character	1	20		Username
PARM_PASSWORD	Optional	Character	1	20		Password
ARM_ALTMERCHID	Optional	Numeric	1	20		Alternative merchant ID

Field	Rule	Type	Minimum	Maximum	Value(s)	
PARM_TIMEZONE	Optional	Numeric	1	20		Time zone
PARM_TOKEN_TYPE	Optional	Character	1	20		Token type
PARM_PARTNERID	Optional	Character	1	20		
PARM_TRANSPORT_KEY	Optional	Character	1	20		Transport key
POS_RECON	Optional	Character	1	30		POS reconciliation. POS back in response to POS.
COUNTER	Required	Numeric	1	10		COUNTER is used for a should be higher than the the POS. Example: 18
MAC		Base64 Encoded Data	N/A	N/A	N/A	Message Authentication POS.
MAC_LABEL	Required	Character	1	50		Associated label that tells to decrypt the value of M POS. Example: REG1

Example

Following is an example of request packet

<TRANSACTION>

- <FUNCTION_TYPE>DEVICE</function_TYPE>
- <COMMAND>SET_PARM</COMMAND>
- <PARAM>GRATUITYPERCENT1=1000 | GRATUITYPERCENT2=1100/ PARAM>
- <PARM_HOST_IND>FDRC</PARM_HOST_IND>
- <COUNTER>1</COUNTER>
- <MAC> ... </MAC>
- <MAC_LABEL>REG2</MAC_LABEL>
- </TRANSACTION>

Response Packet

Field	Type	Value	Description
RESPONSE_TEXT	Character	r	Processor response text. Example: VTP COMMND PROCESSED418
RESULT	Character	r	This indicates the Result details. Example: CAPTURED
RESULT_CODE	Numeric	Expected result code: -1, 4, 59001, 59006, 59040	This indicates the result code.

Field	Type	Value	Description
TERMINATION_STATUS	S 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.
POS_RECON	Character		POS reconciliation field echoed back if sent in request. Example: RetailPOS1
COUNTER	Numeric		Echoes counter sent in the request. Example: 18

Transaction Performance Metric

Note

These fields are returned, if SCAPERFMETRIC parameter (Application Parameters) is enabled.

Field	Type Value	Description
UI_TIME	Time	This indicates the time duration, for which the device screen is displayed (like error message, prompt screen, remove card screen) till any user action is performed in the command execution flow. This field is not applicable to capture the time for the Processing, Authorizing and transaction status screen. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. Example: <ui_time>44.028</ui_time>
HOST_TIME	Time	This indicates the time taken for the Connection to the host, sending request and receives data from the host. This field also take the cumulative time for multiple requests which may sent to the host during the transaction including two legged transactions, timeout requests, Auto Last Tran requests, DCC, Credit app proxy. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. Example: <pre>HOST_TIME>1.389</pre> / HOST_TIME>
CMD_TIME	Time	This field indicates the total amount of time for a command, which is executed by the application from request received to the response sent. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. Example: <cmd_time>70.765</cmd_time>

NOTE: After modification of the MID/TID/URLS/Lane ID or any host related parameters it is required to restart the application for the parameter to take an effect.

Example

Following is an example of response packet

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<RESPONSE>
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<RESPONSE_TEXT>Operation SUCCESSFUL</RESPONSE_TEXT>

<RESULT>OK</RESULT>

<RESULT_CODE>-1</RESULT_CODE>

<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>

<COUNTER>144</COUNTER>

</RESPONSE>