

Display QR Code

This command directs the device to pass data of the QR code (provided by user) to be displayed. Here, the user is asking for the ability to pass a string of data to the application, and this will dynamically generate the QR code and display it on the POS.

Rules

The DISPLAY_QRCODE command is intended for non-payment purposes and is used outside of a payment transaction. It can be sent inside or outside the session.

Configuration Parameters

Following are the configuration parameters which affect the operation

- IDLEQRINFO
- IDLEQRTO
- BTPAIRMODE

DISPLAY_QRCODE (Message Interface)

The following tables provide corresponding device UI interactions, detailed protocol information, including field descriptions and examples.

Device UI Required

Note

Neo device (M450) is being used to capture screenshots for the Device UI Requirement section.

Display

User Action

Terminal Action



Scan the QR Code The device displays the QR Code.

Request Packet

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
FUNCTION_TYPE	Required	Static value	N/A	N/A	DEVICE	Type of function.
COMMAND	Required	Static value	N/A	N/A	DISPLAY_QRCODE	Command name
QRCODE_DATA	Required	Character	1	200		Textual data that will be constructed into a QR code image for display. This is the QR Code payload. Value represents web URL, coupon code, etc. Example: https://www.verifone.com
DISPLAY_TEXT	Optional	Character	1	150		Instructions for consumer to use the QR code. If there is no data entered in this field, then no instructions will appear on the screen. Example: Scan the QR code below for up-to-the-minute offers and coupons!
DISPLAY_TIMEOUT	Optional	Numeric	1	300		Duration of time to display the QR code, in seconds. If there is no value specified, the QR screen will remain till the next command from POS or until DONE button is pressed. Example: 30

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
DISPLAY_BUTTONS	Optional	Binary			Valid values: 0/1	Type of display buttons to be sent. This functionality is not applicable for e235 device. Optional text label for DONE button. Button displayed if the value is provided. This functionality is not applicable for e235 device. Example: Continue Finished
BUTTON_LABEL	Optional	Character	1	18		POS reconciliation. POS Reconciliation field to be echoed back in response to POS. Example: RetailPOS1
POS_RECON	Optional	Character	1	30		COUNTER is used for a given MAC label. Each COUNTER should be higher than the last one. This is used to authenticate the POS. Example: 100
COUNTER	Required	Numeric	1	10		Message Authentication Code. This is used to authenticate the POS.
MAC	Required	Base64 Encoded Data	N/A	N/A	N/A	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
MAC_LABEL	Required	Character	1	50		

Example

Following is an example of request packet

```

<TRANSACTION>
  <FUNCTION_TYPE>DEVICE</FUNCTION_TYPE>
  <COMMAND>DISPLAY_QRCODE</COMMAND>
  <QRCODE_DATA>https://www.verifone.com</QRCODE_DATA>
  <DISPLAY_TEXT>Scan the QR code below </DISPLAY_TEXT>

```

```

<DISPLAY_TIMEOUT>10</DISPLAY_TIMEOUT>
<DISPLAY_BUTTONS>1</DISPLAY_BUTTONS>
<BUTTON_LABEL>PRESS AFTER SCAN</BUTTON_LABEL>
</TRANSACTION>

```

Response Packet

Field	Type	Value	Description
RESPONSE_TEXT	Character	<ul style="list-style-type: none"> For SUCCESS: Operation SUCCESSFUL For TIMEOUT: Cancelled by Timeout For CANCELLED: Cancelled by Customer 	Processor response text.
RESULT	Character	<ul style="list-style-type: none"> For SUCCESS: OK For TIMEOUT: CANCELLED For CANCELLED: CANCELLED 	This indicates the Result details.
RESULT_CODE	Numeric	<p>Expected result code:</p> <ul style="list-style-type: none"> -1 : Success 59000: TIMEOUT 59001: CANCELLED 	This indicates the result code. Refer to Result/Error Codes for details.
TERMINATION_STATUS	Character	SUCCESS or 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. NOTE: Termination status returns SUCCESS for successful operation and FAILURE for timeout and cancelled result.
POS_RECON	Character		POS reconciliation field echoed back if sent in request. Example: RetailPOS1
COUNTER	Numeric		Echoes counter sent in the request. Example: 100

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: <HOST_TIME>1.389</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>

Example

Following is an example of response packet

```
<RESPONSE>
  <RESPONSE_TEXT>Operation SUCCESSFUL</RESPONSE_TEXT>
  <RESULT>OK</RESULT>
  <RESULT_CODE>-1</RESULT_CODE>
  <TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
</RESPONSE>
```