

DISPLAY_IMAGE

This command will direct the device to render an on-demand full screen image using data sent by POS. The image will be displayed for a specified timeout period. Optionally, up to two buttons, Cancel and Ok (Accept), can be displayed beneath the image.

Device UI Required

Display	User Action	Terminal Action
ଓରେ∆ ଘଟ	No action	The device displays the provided image.

Request Packet

Field	Rule	Туре	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_IMAGE	Command name



Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
IMAGE_NAME	Optional	Character		40		Displays the image with the given name from the device. The image needs to be pre downloaded either using package or content download on the below device location: '/home/usr1/flash /www/'. If the file does not exist on the device, then POS will throw an error. The image name can be set as any name and the resolution is same as idle screen media resolution. This is applicable for VOS3 only.
IMAGE_DATA	Required	Base64 Encoded Data				Base64 encoded string (maximum 32,000) of JPG or PNG format to be converted to an image. This is an optional field if IMAGE_NAME is available.



Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
IMAGE_TIMEOUT	Required	Numeric	1	299		The duration of time to display image, in seconds. New DISPLAY_IMAGE command would cancel current timer and start the new timer as it comes in the new command. Example: 30
DISPLAY_BUTTON S	Optional	Boolean	N/A	N/A	• 0 - Displays image only. • 1 - Displays 2 buttons under image: Cancel and Ok (accept)	Type of display buttons to be sent. NOTE: This functionality is not applicable or e235 device.
BUTTON_LABEL1	Optional	Character	1	15		Text label to be displayed on the Cancel button. NOTE: This functionality is not applicable or e235 device.
BUTTON_LABEL2	Optional	Character	1	15		Text label to be displayed on the OK button. NOTE: This functionality is not applicable or e235 device.



Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
HIDE_CANCEL_B UTTON	Optional	Boolean	N/A	N/A	 TRUE - Displays only OK button. FALSE - Displays Cancel and OK buttons. 	This field is applicable when DISPLAY_BUTTON S field is set 1. NOTE: This functionality is not applicable on e235 device.
RETURN_SCREEN	Optional	List	N/A	N/A	IDLE_SCR EEN - Return to SCA Idle Screen (Default). SAME_SC REEN - SCA should remain on current image screen and await the next comman d from POS.	Indicates whether SCA should return to Idle Screen or remain on current Image if POS plans to send additional images.
POS_RECON	Optional	Character	1	30		POS reconciliation. POS Reconciliation field to be echoed back in response to POS. Example: RetailPOS1

Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
COUNTER	Required	Numeric	1	10		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
MAC	Required	Base64 Encoded Data	N/A	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

Example

Following is an example of request packet

```
<TRANSACTION>
<FUNCTION_TYPE>DEVICE</FUNCTION_TYPE>
<COMMAND>DISPLAY_IMAGE</COMMAND>
<IMAGE_DATA>Base64 encoded string</IMAGE_DATA>
<IMAGE_TIMEOUT>30</IMAGE_TIMEOUT>
<COUNTER>1</COUNTER>
<MAC> ... </MAC>
<MAC_LABEL>REG2</MAC_LABEL>
</TRANSACTION>
```

Response Packet

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



Field	Туре	Value	Description
RESPONSE_TEXT	Character		Processor response text. Example: Image Details Captured
RESULT	Character		This indicates the Result details. Example: OK
RESULT_CODE	Numeric	Expected result code: -1, 59001, 59040, 59042, 59043, 59049	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.
TIMEOUT_RESULT	Character	 SUCCESS (if OK selected) TIMEOUT (if message box times out) 	Return the timeout result with value mentioned in Value column. Not included in response for Classic implementation as of this publication.
CUST_BUTTON_DATA	Character	• 1 - Cancel • 2 - OK	Represents button selected information for Cancel and OK.
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 ($\underline{\text{Application Parameters}}$) is enabled.

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



Field	Туре	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: wuil-time 44.028
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

Field	Туре	Value	Description
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: <pre><cmd_time< pre=""></cmd_time<></pre>

Note

By default, the buttons will appear with OK and Cancel labels, and buttons will contain the label on them.

Example

Following is an example of response packet

```
<RESPONSE>
<RESPONSE_TEXT>Image Details Captured</RESPONSE_TEXT>
<RESULT>OK</RESULT>
<RESULT_CODE>-1</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
<CUST_BUTTON_DATA>2</CUST_BUTTON_DATA>
<COUNTER>1</COUNTER>
</RESPONSE>
```