AC-825IP

Rosslare OSDP Support Commands

Technical Note

1. Summary

This technical note lists the Rosslare OSDP commands that can be sent from a Rosslare access control panel (CP) to a peripheral device (PD) and the replies that can be sent from a PD to a CP.

2. Supported Products

Control panel

- AC-825IP

Peripheral devices

- Expansion boards for AC-825IP: R/S/D/P 805

- Multi-Smart™ readers: AY-x35

- CSN SELECT™ smart card readers: AY-x6x55

- UHF SMART™ readers: AY-U9xxBT

- Open to Secure (O2S) readers: AY-x6x80

> 📄 A CP can communicate to one or more PDs at the same time.

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3. Rosslare OSDP Commands and Replies

OSDP is a communication protocol between a CP (master) and PDs (slaves). In OSDP communication, the CP sends a command to a PD. A PD must reply to a CP command. The reply will acknowledge that the command was received or will give an answer to the command request such as output status.

One of the most important features of OSDP is OSDP-SC (Secure Channel). OSDP-SC makes the data exchange secure. With OSDP-SC data is transferred in encrypted form. It provides device authentication, data content security, and message authentication.

3.1. Control Panel Commands

The following commands can be sent from a CP to a PD. Values 0x40 through 0x8F are reserved for core commands. Values from 0x90 and higher are used by Rosslare for application specific and/or proprietary implementation.

OSDP Standard	Value	Description
osdp_POLL	0x60	Keep-Alive (heart beat).
osdp_ID	0x61	Requests PD to reply with PD ID Report.
osdp_CAP	0x62	Requests PD to reply with a list of its functional capabilities.
osdp_ISTAT	0x65	Requests PD to reply with an input status report.
osdp_OSTAT	0x66	Requests PD to reply with an output status report.
osdp_OUT	0x68	Output operations.
osdp_LED	0x69	LED operations.
osdp_BUZ	0x6A	Buzzer operation
osdp_KEYSET	0x75	Transfers an encryption key from the CP to a PD
osdp_CHLNG	0x76	First command in the Secure Channel Session Connection Sequence (SCS-CS)
osdp_SCRYPT	0x77	Transfers a block of data used for encryption synchronization.

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osdp_READER_CONFIG	0x91	Configure readers (D805)
osdp_INVENTORY	0x92	Get the manufacture data
osdp_SOUNDER	0x93	Activate the sounder (PM15) connected to x805
osdp_JUMP_TO_BOOT	0x94	Perform reset.
osdp_AUTOMATION	0x95	For internal test
osdp_LOG_SEVERITY_SET	0x97	Set the log severity
osdp_LOG_SEVERITY_GET	0x98	Get the log severity

Currently Not In Use		
osdp_LSTAT	0x64	N/A
osdp_RSTAT	0x67	N/A
osdp_COMSET	0x6E	N/A

3.2. Peripheral Device Replies

The following replies are sent from the PD to a CP. The PD sends a reply to the CP after it receives the last character of a valid command. A PD sends a reply to a CP only if a request was received from the CP, i.e. the CP sent a command to the address for this PD.

OSDP Standard	Value	Description
osdp_OSTSTR	0x4A	Sent to indicate that the output(s) have changed state.
osdp_RSTATR	0x4B	Sent if the status of any of the readers has changed since the last report.
osdp_ACK	0x40	Sent in response to all valid commands that do not require a specific response.
osdp_NAK	0x41	Negative acknowledge - SIO Comm Handler Error Response
osdp_PDID	0x45	Reply with PD ID
osdp_PDCAP	0x46	Reply with PD capabilities
osdp_LSTATR	0x48	Sent if status has changed since the last POLL.
osdp_ISTATR	0x49	Sent following change in input status.
osdp_RAW	0x50	Sent after a card was read but the raw data was not decoded into a character array.
osdp_FMT	0x51	Sent when decoded and formatted card data is available.
osdp_KEYPAD	0x53	Sent if there is any data in the keypad buffer.
osdp_CCRYPT	0x76	Sends a block of data used for encryption synchronization.
osdp_RMAC_I	0x78	Transfers a block of data used for encryption synchronization
osdp_BUSY	0x79	Sent in if the PD is busy processing the previous command.

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osdp_DEVICE_POWER	0x21	Return the data of PM15 (connected to x805).
osdp_GLOG	0x23	Send log to AC-825IP
osdp_DEVICE_RESTART	0x24	Report that PD was restarted.
osdp_LOG_SEVERITY_REPLY	0x99	Return the log severity.
osdp_INVENTORYR	0x9A	Reply with manufacture data.

For more information regarding support, visit https://support.rosslaresecurity.com.