

Cypress OSMIUM OSM-1000 universal OSDP interface module with HID iclass SE RP 10 reader

Overview









Using the OSDP interface module and HID iclass reader that is OSDP compliant you can encrypt the data with AES- 128 encryption between the reader at the door and the Net2 plus doorcontroller making it almost impossible to intercept and use the data transmitted over the cable.

The cardreader used with the Cypress Osmium interface has to be OSDP compliant. This means that the reader has to be able to be configured to work with this protocol. The reader transmits the encrypted data over a RS485 data line to the OSDP interface. The OSDP interface that for instance sits in the housing of a Net2 door controller unit will transmit the data to the Net2 door controller via Wiegand.











The reader has to be wired to the OSDP interface in the following way:

Reader	OSDP Interface
RS485 B	RS485 B
RS485 A	RS485 A
-	-
-	-
-	-
-	-
GND	GND
PWR +	PWR +

	RS485 B
	RS485 A
	GND
	Strike N.O.
	Strike Com
	Strike N.C
	GND
	PWR +

The OSDP interface has to be wired to the ACU in the following way:

	OSDP Interface	ACU terminal
PWR +	PWR +	+12V
GND	-	Red LED
GND	-	Amber LED
LED	LED	Green LED
Data 0	Data 0	Wiegand D0
Data 1	Data 1	Wiegand D1
REX	-	NOT USED
Alarm	Black	0V

	Red 12V dc
	Red LED
	Amber LED
	Green LED
	Data/D0
	Clock/D1
	Media Detect
	0V out

Ensure any unused wires are safely terminated.

This setup was tested with the reader mentioned above and OSDP interface and HID iclass SEOS 26 bits cards. The Reader setting in Net2 has to be set to "Wiegand" and "Wiegand 26 bits".

In the Net2 configuration utility in the tab "General", set the LED settings to "Display reader LED's in OEM style"

Other points of attention are:

- 2 wire RS485 cabling with a maximum of 1,2 kilometers
- OSDP interface Wiegand output with a maximum of 152 meters
- Cypress Osmium OSDP interface 7 to 24VDC power supply
- DIP switches 1 and 2 on the OSDP interface are turned "on"

