CYPRESS
INTEGRATION SOLUTIONS

OSDP Universal Door Interface
OSM-UDI

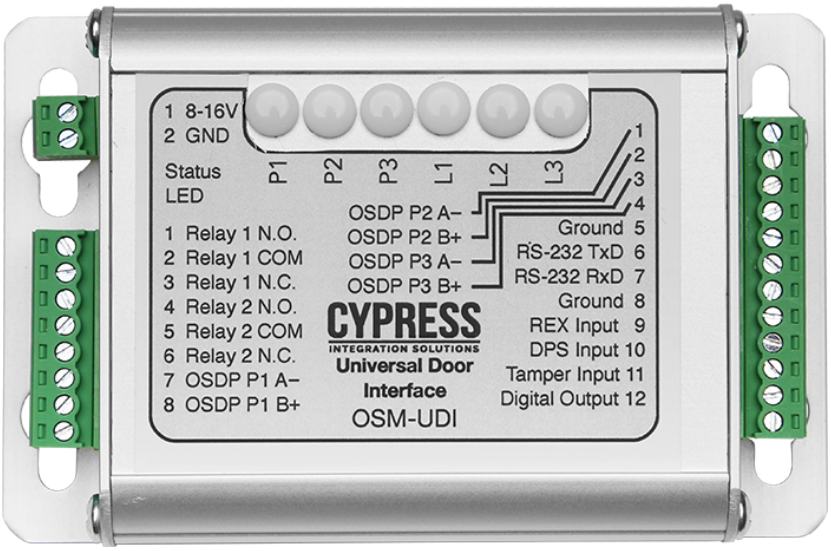
Product Sheet

Overview

The OSDP Universal Door Interface allows an OSDP access controller to monitor and control door hardware using I/O on the OSM-UDI, and provides (2) physically isolated OSDP busses for OSDP readers and other peripheral devices (PDs).

Supported I/O:
- (2) dry contact relays for door/gate strike
- Digital Input for Request to Exit (REX) switch
- Digital Input for Door Position Sensor (DPS)
- Digital Input for tamper switch
- Digital Output for auxiliary function

Ports:
The OSM-UDI has (3) OSDP ports and is an addressed PD connected to the access controller.
- *Port 1:* Used to connect to an OSDP access controller.
- *Ports 2 and 3:* Used to connect OSDP PDs at the door, such as an ingress reader and egress reader. Multiple OSDP PDs can be connected to Ports 2 and 3. PDs that are connected to Ports 2 and 3 transparently communicate to the OSDP access controller through Port 1.



MADE IN USA

RoHS

OSM-UDI_PS_220407

1778 Imlay City Road, Lapeer, MI 48446 800-807-2977

OSDP Port Isolation

The OSM-UDI provides protection against some physical failures an OSDP network can experience. Each OSDP Port on the OSM-UDI is independent and has its own RS-485 driver. This minimizes a network faults such as a short between the (2) RS-485 lines or one of the lines being grounded. Typically, one of these faults would make it impossible for any device on the network to communicate, but in applications using the OSM-UDI, only devices on the OSDP Port with the fault are affected.

Additionally, the OSM-UDI helps to isolate electrical damage to devices on the OSDP port experiencing an adverse electrical event, while devices on the other OSDP Ports are less likely to be damaged.

Specifications			
Part Number	Part Number		OSM-UDI
	UPC		816684004568
Physical	Physical Dimensions (L x W x H)		4.50 x 2.85 x 0.94 inches | 114.30 x 7.24 x 2.39 cm
	OSDP Ports		3 OSDP Ports | 1 IN Reader Port, 1 OUT Reader Port, 1 OSDP Access Control System Port
Environmental	Operating Temperature Range		-40ºF to 158ºF | -40ºC to 70ºC
	Enclosure Rating		Not rated for water or dust intrusion
Electrical	Supply Voltage		8 - 16 Vdc (12V typical) @ 300 mA
	Relays	Max Switching	220Vdc 30W (resistive) 1A / 250Vac 37.5VA 1A
		Running Spec with load	30Vdc 1A (resistive) / 125 Vac 0.3A (resistive), $1x10^5$ operations @ 20˚C
Supported I/O	2 Dry Contact Relay Outputs - 1 for door strike or gate activation, 1 for auxiliary function		
	3 Digital Inputs (Active Low) - 1 for REX Switch, 1 for DPS, and 1 for Tamper Input		
	1 Digital Output (Active Low) - For auxiliary function		
	Digital I/O can be configured as either inputs or outputs if needed.		
LED Indicators	Main Status LED		Indicates configuration status (default, custom, invalid, corrupted)
	OSDP Port LEDs (P1, P2, P3)		Indicates status of OSDP Port (No Communication, Clear Channel Session, Secure Channel Session, Reader data)
	I/O Status (L1, L2, L3)		Indicates status of I/O pins (Normal, Active)
Additional Features	Logically isolated OSDP ports limit downed devices when OSDP communication wires are shorted.		
	Provides limited protection against electrical damage to OSDP devices on other OSDP ports.		

OSM-UDI Wiring Diagram