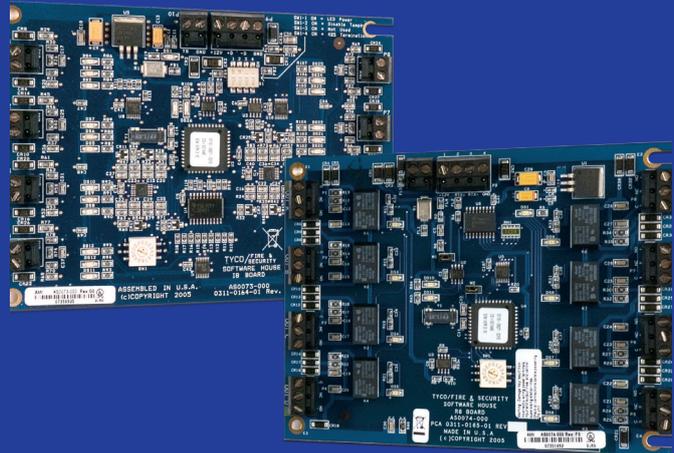Johnson Controls

SOFTWARE HOUSE

OSDP I8/ R8 Input/ Output Expansion Modules

Backward compatible
Choice of OSDP* Secure Channel or Software House "RM" via onboard dip switch

Increased Scalability
Expand controller capacity with 8 supervised inputs per individual I8 and 8 outputs per individual R8 module

Cost Effective Wiring
Input and Output module lowers wiring costs & reduces installation time

Accurate functionality check
Detailed visual inspection LEDs for power, communication, inputs and outputs

Secured and Open
End-to-end encrypted communication based on industry open standards

Convenient Power Source
Wet / dry output terminals directly power local devices such as sounders and strobes

The Software House OSDP I8/R8 Input/Output modules provide a flexible, cost-effective means to upgrade access control security without an intensive system overhaul.

The OSDP I8/R8 modules leverage Open Supervised Device Protocol (OSDP) as an end-to-end encrypted communication based on industry open standards, yet through a simple dip-switch, they enable back-ward compatibility with Software House „RM" protocols for a cost-effective retrofit to quickly increase your security while future-proofing your investment.

The transition to OSDP's enhanced encryption and cybersecurity features becomes seamless and easy, reducing wiring costs and installation time. Featuring wet/dry selectable outputs, the OSDP R8 modules simplify field wiring for even the more advanced door installations.

Paired with OSDP-verified iSTAR G2 controllers, the OSDP I8/R8 modules exponentially increase your security from devices to controller, and also enable you to expand your controller capacity with 8 supervised inputs per individual I8 and 8 outputs per individual R8 module, further reducing costly real estate and wiring requirements. The OSDP I8/R8 modules are part of a rich portfolio of OSDP products offered globally.

I8 Input Module

Physical Specifications

The OSDP - I8 module will fit within the same mounting points and enclosures as the first generation I8 module.

Module dimensions	(H x W x D) 110 x 150 x 19mm
	(4.33 x 5.91 x 0.75)

Operating and Storage temperature:

32-120° F (0-49° C); 90% relative humidity @ 90° F (32° C)

Input Electrical Specifications	+12 VDC	+24 VDC
Voltage range	12VDC+/- 10%	24VDC +/- 10%
Power requirements with inputs	39 mA	23 mA

Communications Specifications

Communications bus	RS-485 half-duplex, OSDP OR RM Protocol
Addressing	00-99 (OSDP) or 01-08 (RM)
Maximum distance +12 VDC	1219 m (4000 ft). Check installation guide for details on wiring distances
Baud Rate	OSDP: 9600, 38400,115200 autobaud. RM: 9600

Inputs, tamper, termination, and module LEDs

Inputs	Provides 8 additional supervised inputs
	OSDP: supervision circuitry software configurable, per input
	RM: supervision circuitry configurable via dip switch that configures all 8 inputs
	Circuits Supported: Single resistor (1K, 5K, 10K), Double resistor (1K, 5K, 10K), 1K/2K, 6.8K/18K, 200/1K, Unsupervised NO, NC
Termination	Includes a built-in RS-485 end-of-line termination switch
Tamper input	1 tamper input for use with an external tamper switch:
	• RM mode: normally closed
	• OSDP mode: supervised

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LEDs	LEDs for the following:
	• Supervised input
	• RS-485 transit and receive.
	• Power-on
	• RM/OSDP mode
	• Incorrect address
	• Baud rate/comm
	• Fault LED

Documentation

Scan this QR code to access the full OSDP-I8 installation guide:

Check www.swhouse.com for the latest C•CURE software and hardware documentation.

R8 Output Module

Physical Specifications

The OSDP - R8 module will fit within the same mounting points and enclosures as the first generation I8/R8 module.

Module dimensions	(H x W x D) 110 x 150 x 19 mm
	(4.33 x 5.91 x 0.75 in)

Operating and Storage temperature:

32-120° F (0-49°C); 90% relative humidity 90° F ± (32° C)

Output Electrical Specifications	+12 VDC	+24 VDC
Voltage range	12VDC+/- 10%	24VDC +/- 10%
Voltage Input (Board Draw With Outputs)	345 mA	-
VRELAY Input (PH12)	6 A	6 A
Relay Outputs (PH1-PH8) 0.75 A 0.75 A	1.0 A	1.0 A

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Relay contact power limits	Wet: 12 VDC output 12 VDC, 1 A 24 VDC output 24 VDC, 1 A Dry: 30 VDC, 5 A (NO), 3 A(NC)

Communications Specifications

Communications bus	RS-485 half-duplex, OSDP OR RM Protocol
Addressing	00-99 (OSDP) or 01-08 (RM)
Maximum distance	1219 m (4000 ft). Check installation guide for details on wiring distances
Baud Rate	OSDP : 9600, 38400,115200 autobaud. RM: 9600

Outputs, tamper, termination, and module LEDs

Outputs	8 Wet/Dry Outputs - Wet provides up to 0.75 amp - Dry Contact, Form C' with '- Dry Contact at 32 mA per active relay
Termination	Includes a built-in RS-485 end-of-line termination switch
Tamper input	1 tamper input for use with an external tamper switch: • RM mode: normally closed • OSDP mode: supervised
LEDs	LEDs for the following: • Supervised Tamper Input • RS-485 transmit and receive. • Power-on • RM/OSDP mode • Incorrect address • Baud rate/comm • Fault LED

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Documentation

Scan this QR code to access the full OSDP-I8 installation guide:

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Regulatory Specifications

- UL 294
- UL 2610
- ULC C1076
- IEC EN 60839-11-1, grade 2 function operation
- EN62368 Safety standard
- FCC 47 CFR Part 15, class A
- ICES - 003
- Directive 2014/30/EU(EMC): EN 55032, EN 55035, EN 50130-4, EN IEC 61000-3-2, EN IEC 61000-3-3
- Directive 2011/65/EU (RoHS II)

Ordering Information

Model Number	Description
OSDP-I8	OSDP/RM I8 - Eight Input Reader Bus Module
OSDP-I8-5PK	OSDP/RM I8 - Eight Input Reader Bus Module, 5 Pack
OSDP-R8	OSDP/RMR8 - Eight Output Reader Bus Module
OSDP-R8-5PK	OSDP/RM R8 - Eight Output Reader Bus Module, 5 Pack
RM-DCM-CAN	Large metal enclosure, 356x305x89 mm (14x12x3.5 in) with lock and tamper switch, fits up to four I8 or R8 modules
RM-CAN	Small metal enclosure, 210 x 184 x 83 mm (8.25 x 7.25 x 3.25 in) with lock and tamper switch, fits one I8 or R8 module

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