IOMod 8DI4RO

industrial 8 digital inputs and 4 relay outputs module

IOMod 8DI4RO is a stand-alone Modbus-RTU, IEC 60870-5-101, and IEC 60870-5-103 digital input and digital output controller. Designed to achieve a high technological look and compact fit on DIN rail (EN 60715), IOMod 8DI4RO is used for industrial applications where digital signaling is used and robust communication is essential.

IOMod 8DI4RO is also an ideal solution for such applications as data acquisition, observation, control, process monitoring, testing, and remote measurement.

When using IOMod 8DI4RO with WCC Lite it is possible to monitor/control the I/O signals over Ethernet LANs or 3G/4G(LTE)/GSM/GPRS networks. It is a powerful solution for remote monitoring and control, alarm management, and data logging of I/O's on CloudIndustries.eu cloud platform.

Applications

- Power Grid
- Solar energy projects
- Wind energy projects
- Hydro energy projects
- Energy storage applications
- Factory resources supervision
- Substation automation solutions

Technical documentation

Ordering

Features

- 8 digital inputs
- Configurable input inversion and digital debounce filter
- Configurable SPI, DPI, SCO, and DCO support
- Configurable feedback for outputs with inputs
- Configurable pulse outputs and permanent outputs
- Input grouping
- Output grouping
- Feedback configurable time
- 4 relay outputs
- Galvanically isolated inputs and outputs
- Configuration over USB console
- Drag and Drop firmware upgrade over USB mass storage
- Modbus, IEC 60870-5-101 and IEC-60870-5-103 communication over RS485
- Software selectable termination resistor on RS485
- LED indication for input/output and data transmission

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Inputs and functions	
Digital inputs	8
Input voltage	12-48 VDC
Input signal polarity	Configurable
Input inversion	Configurable
Input filter	Configurable (0..2560000ms)
Input grouping	Up to 4 groups of DPI
Relay outputs	4 (normally open contact)
Output current	‹5A at 250VAC Resistive load ‹2A at 250VAC Inductive load (cos φ = 0.4, L/R = 7 ms) ‹5 A at 30 VDC Resistive load ‹2 A at 30 VDC Inductive load (cos φ = 0.4, L/R = 7 ms) (per each output)
Output max switching voltage	277 VAC, 125 VDC (max switching current 5A)
Output functions	Permanent or Pulse output
Output pulse	Configurable in ms (0..60s)
Output feedback time	Configurable in ms (0..60s)
Output grouping	Up to 2 groups DCO
Interface and communication	
RS485 interface	ANSI/TIA/EIA-485-A-1998
Communication protocols	– Modbus RTU Slave; – IEC 60870-5-101 Slave; – IEC 60870-5-103 Slave.
Baudrate	600 – 115200 baud
Parity	None, Even, Odd
Terminating resistors	120 Ohm (configurable)
USB interface	
Type	Mini USB
Use	Configuration/Firmware upgrade
Power supply	
Auxiliary power supply	9-33VDC (full range)
Power consumption	120mA @ 12VDC, 60mA @ 24 VDC, 30mA @ 48 VDC
Insulation voltage	3 kV

Operating conditions	
Operating temperature	-40°C ... 85°C
Storage temperature	-40°C ... 85°C
Relative humidity	max. 95 % (non-condensing)
Protection class	IP20
Dimensions and installation instructions	
Case height x width x depth	119 x 22.5 x 101 mm
Installation type	DIN Rail mounting

Order Code	
IOMOD-8DI4RO	8 Digital inputs and 4 relay outputs module with IEC 60870-5-103, IEC 60870-5-101, Modbus RTU Slave protocols