

# IOMod 16DI

## industrial 16 digital input module



IOMod 16DI is a stand-alone Modbus (RTU), IEC 60870-5-101 and IEC60870-5-103 digital input and digital output controller. Designed to achieve a high technological look and compact fit on DIN rail (EN 60715), IOMod 16DI is used for industrial applications where digital signaling is used and robust communication is essential.

IOMod 16DI is an ideal solution for such applications as data acquisition, observation, control, process monitoring, testing, and remote measurement. It is controlled over Modbus, IEC 60870-5-101 or IEC60870-5-103 protocol, and can be connected in parallel with other Modbus, IEC 60870-5-101 or IEC60870-5-103 equipment in a multi-drop installation scheme as in any SCADA system.

When using IOMod 16DI with WCC Lite gateway 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 projects



Technical  
documentation



Ordering

## Features

- 16 digital inputs
- Configurable active input signal polarity or input inversion
- Configurable SPI, DPI
- Pulse count and ON time count
- Galvanically isolated inputs
- Configuration over USB console
- Drag and Drop firmware upgrade over USB mass storage
- Modbus, IEC 60870-5-101 or IEC60870-5-103 communication over RS485
- Software selectable termination resistor on RS485
- LED indication for input and data transmission
- Easy connection with WCC Lite gateway and CloudIndustries.eu platform

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Inputs and functions	
Digital inputs	16
Input voltage	12-24 VDC
Input signal polarity	Configurable
Input inversion	Configurable
Input filter	Configurable (0..256000ms)
Input counter	16 (one per input) with a reset function
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	40mA @ 12VDC, 20mA @ 24 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 17.5 x 101 mm
Installation type	DIN Rail mounting

Order Code	
<u>IOMOD-16DI</u>	16 Digital input module with IEC 60870-5-103, IEC 60870-5-101, or Modbus RTU Slave protocol