Your vision, automated

MCOM300IO

INDUSTRIAL INPUT OUTPUT MODULE

MCOM lunches a series of remote I/O unit for industrial monitoring and controlling applications. With the auto configuration and hot swap features, the unit can eliminate your nightmare of extensive labour on the set-up and maintenance of the automation system.

The available I/O modules are also highly flexible and compatible for every kind of application to reduce your inventory of different types of I/O modules. Furthermore, there are various communication interface and protocols for choice in various remote I/O applications.

The MCOM300IO is a compact industrial-grade I/O expansion module designed for PLC, SCADA, and Industrial Automation applications. It provides 8 Digital Inputs, 8 Digital Outputs, and 8 Analog Inputs, making it ideal for process monitoring, machine automation, and remote I/O expansion.

With opto-isolated inputs, high-current transistor outputs, and selectable current analog inputs, this module ensures reliable operation in harsh industrial environments. LED indicators for each channel allow easy status monitoring, and optional RS485 Modbus RTU communication enables seamless integration with PLCs and SCADA systems.

➢ INPUT OUTPUT SPECIFICATIONS

Digital Input		
Input Channels	8	
Type	Wet Contact (Sink)	
On Voltage Level	+12.0 VDC ~ 30 VDC	
Off Voltage Level	+11 V max.	
Input Impedance	10 KΩ, 0.66 W	
Digital Output		
Output Channels	8	
Type	Open Collector (Source)	
Max. Load Current	500 mA/channel	
Load Voltage	+12 VDC ~ +30 VDC	
Analog Intput		
Intput Channels	8	
Type	0 ~ 500 mV/ 0 ~ 1 V/ 0 ~ 2.5 V/ 0 ~ 5 V/ 0 ~ 10 V/ 0 ~ 20 mA/ 4 ~ 20 mA	
Resolution	12-bit	
Sampling Rate	100 Hz total	
Accuracy	+/-0.1%	
Zero Drift	+/- 20 μV/°C	
Span Drift	+/- 25 ppm/°C	
Input Impedance	Voltage	10 MΩ
	Current	100 Ω
Open Wire Detection for 4 ~ 20 mA	Yes	

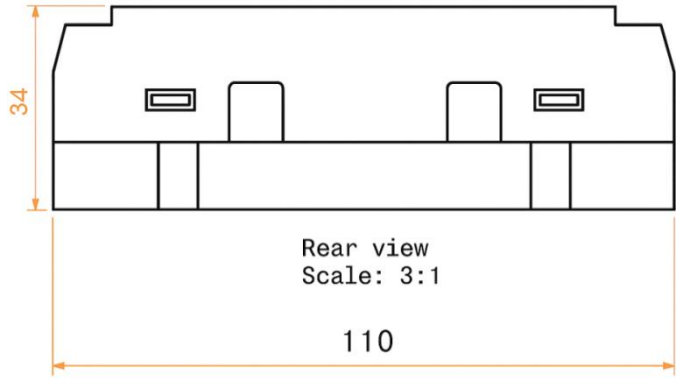
➢ SYSTEM SPECIFICATIONS

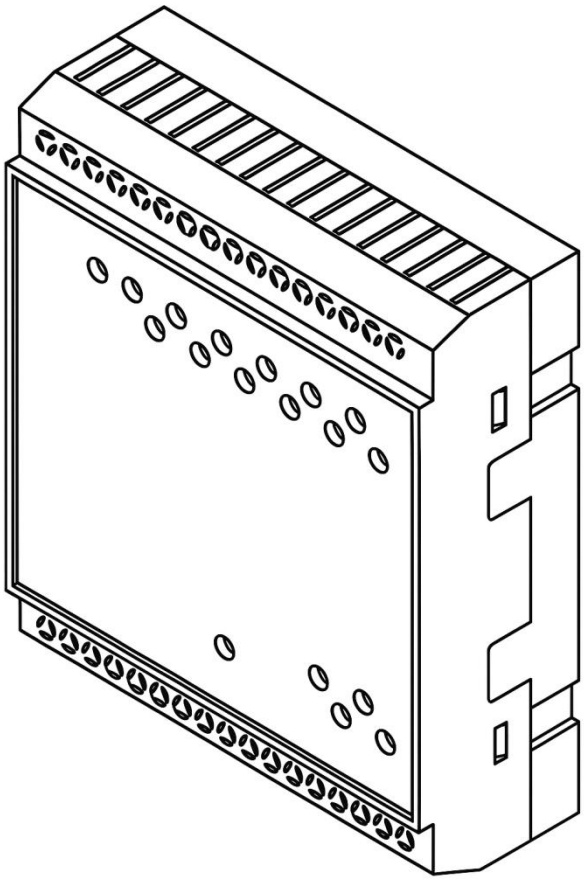
COMMUNICATION	
Interface	RS-485
Format	(N, 8, 1), (N, 8, 2), (O, 8, 1), (E, 8, 1)
Baud Rate	1200 ~ 115200 bps
Protocol	Modbus/RTU
Watchdog	Yes
POWER REQUIREMENTS	
Reverse Polarity Protection	Yes
Powered from Terminal Block	Yes, 12 ~ 30 VDC
Consumption	0.5 W Max.
ENVIRONMENT	
Operating Temperature	-25 °C ~ +75 °C
Storage Temperature	-30 °C ~ +75 °C
Humidity	10 ~ 95% RH, Non-condensing

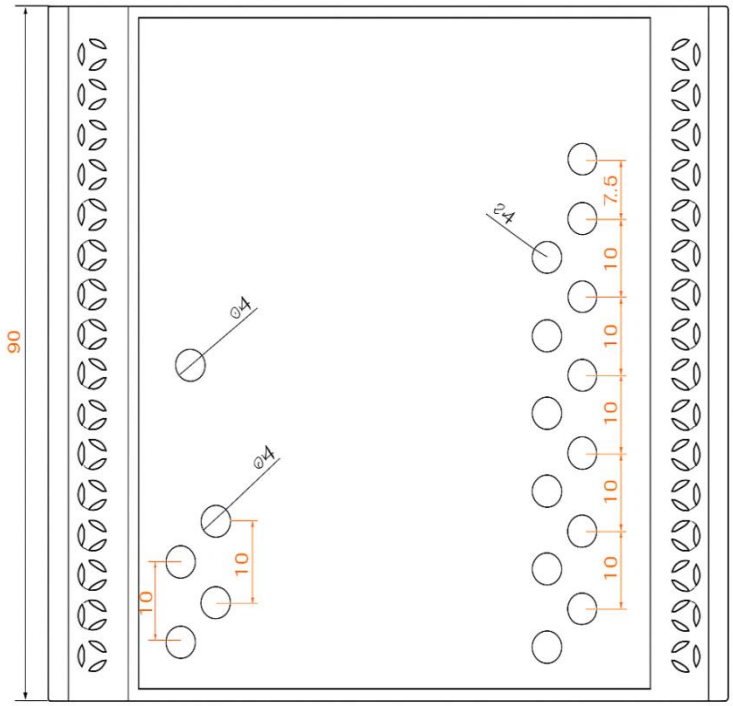
➢ FEATURES

- Source-type Digital Outputs
- Sink-type Digital Inputs
- Octocoupler Isolation
- 8-channel Single-ended for Analog input.
- Resolution: 12 bit for Analog input
- Voltage Inputs and Current Inputs
- Watchdog
- Cost-effective
- Wide Operating Temperature Range: -25 °C ~ +75 °C

➢ DIMENSION DIAGRAM

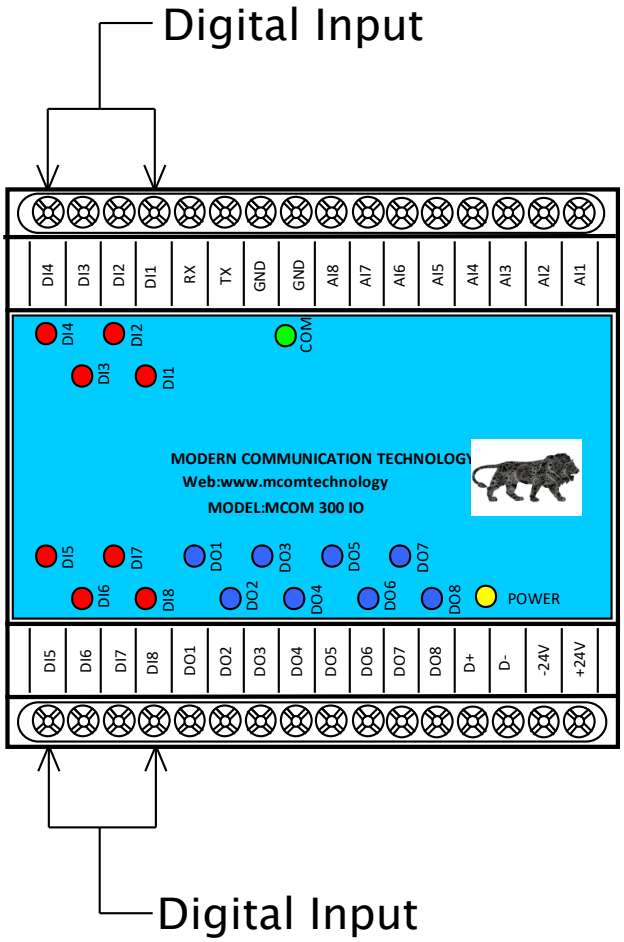




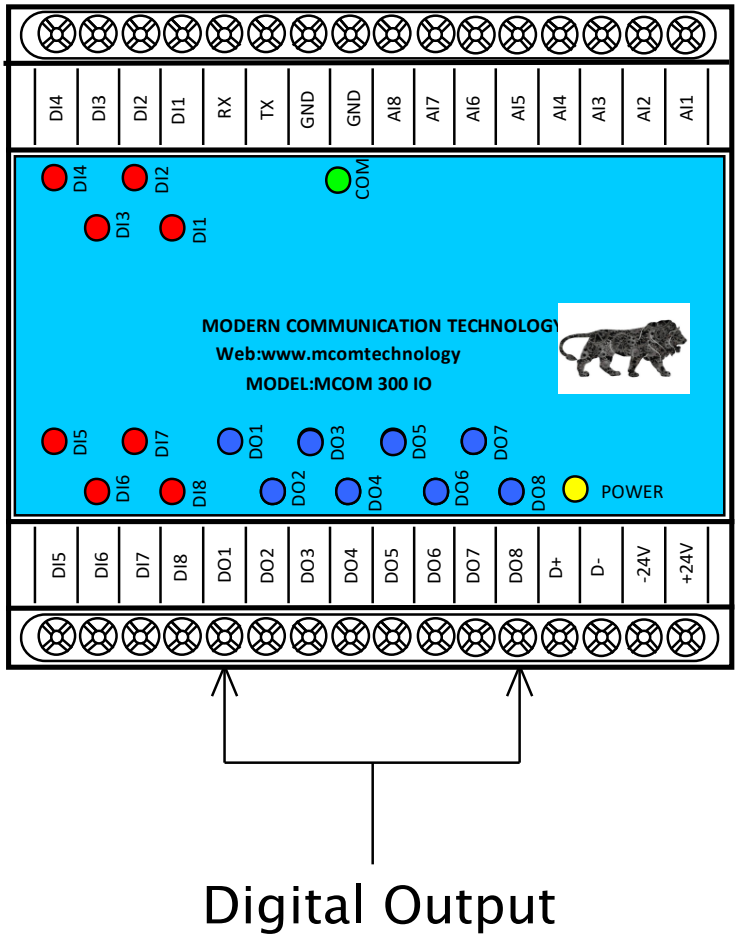


Bottom view
Scale: 3:1

➢ DIGITAL INPUT

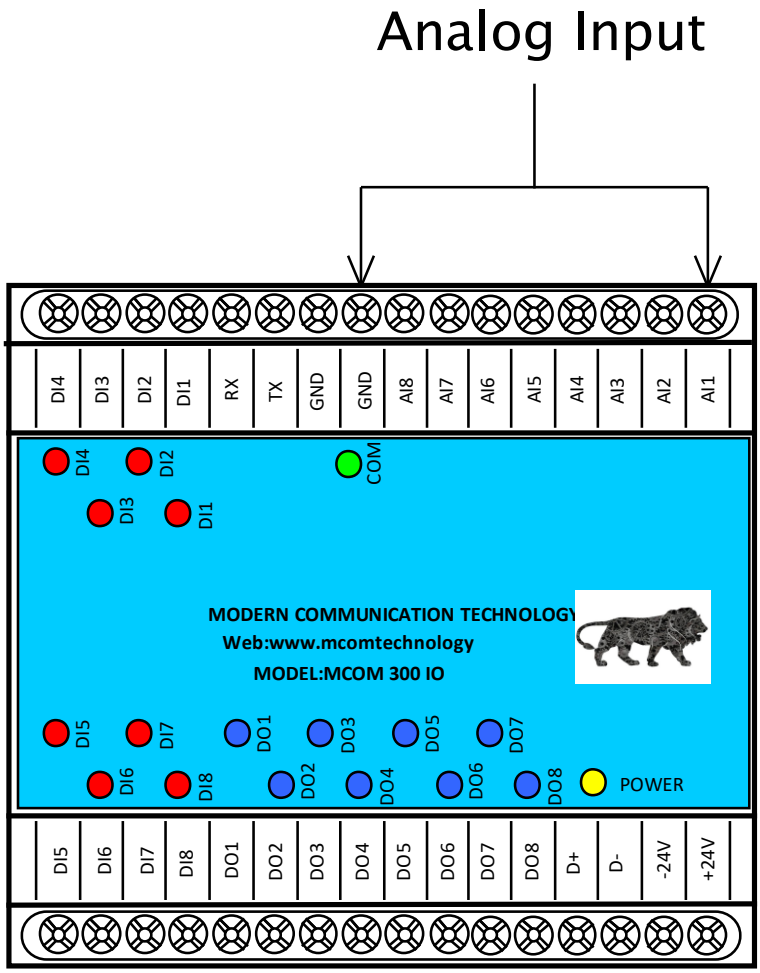


➢ DIGITAL OUTPUT

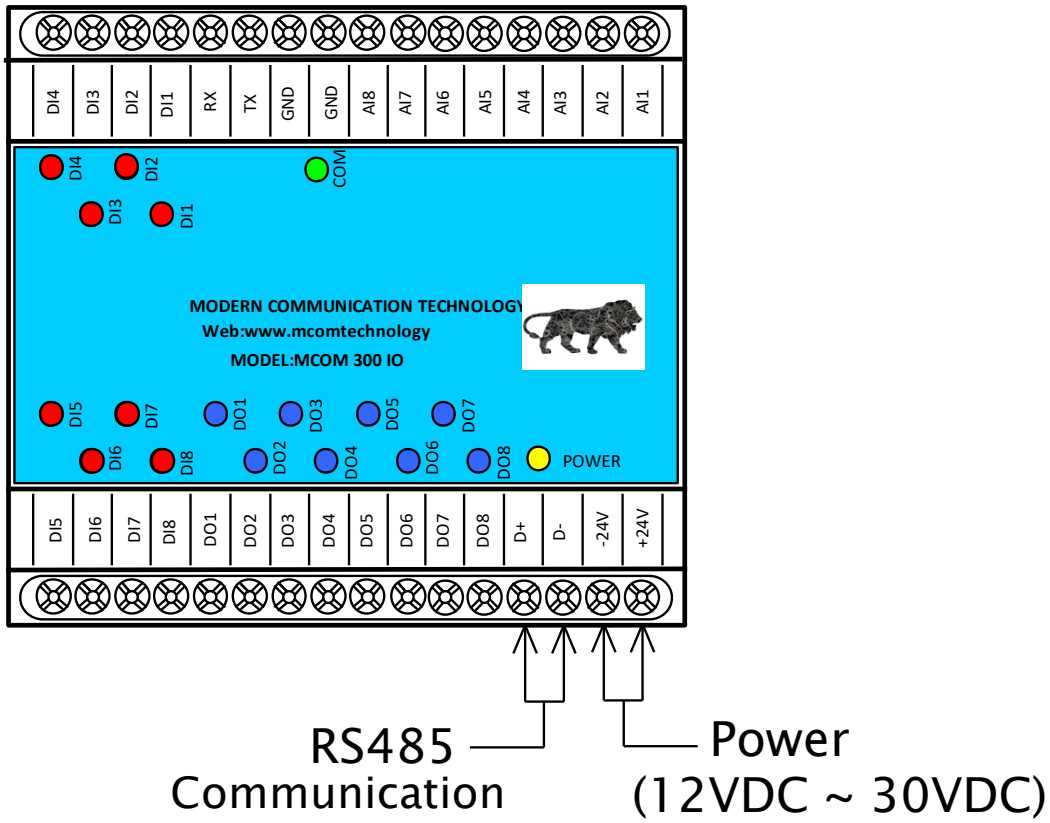


Digital Output

➢ ANALOG INPUT



➢ POWER & RS485


DI4 DI3 DI2 DI1 RX TX GND GND AI8 AI7 AI6 AI5 AI4 AI3 AI2 AI1
DI4 DI2 COM
DI3 DI1
MODERN COMMUNICATION TECHNOLOGY
Web:www.mcomtechnology
MODEL:MCOM 300 IO
DI5 DI7 DO1 DO3 DO5 DO7
DI6 DI8 DO2 DO4 DO6 DO8 POWER
DI5 DI6 DI7 DI8 DO1 DO2 DO3 DO4 DO5 DO6 DO7 DO8 D+ D- -24V +24V
RS485
Communication
Power
(12VDC ~ 30VDC)