

Your vision, automated



MCOM401RTU



INDUSTRIAL INPUT OUTPUT MODULE

The MCOM401RTU is a rugged, industrial-grade cellular RTU designed to deliver reliable mobile connectivity for Machine-to-Machine (M2M) and remote automation applications. Engineered for harsh environments, it supports seamless data acquisition, monitoring, and control through serial (RS485/RS232), Ethernet, HART, and built-in I/O channels.

Equipped with 8 analog inputs, 16 digital inputs, 8 digital outputs, dual SIM slots, dual Ethernet ports, and micro SD storage, the MCOM401RTU ensures continuous communication with high data reliability. With auto-switchable 4G/3G/2G connectivity and a minimum reporting interval of 1 second, it is ideal for remote PLC integration, MODBUS communication, and real-time field data transmission.

➤ FEATURES

- Source-type Digital Outputs
- Sink-type Digital Inputs
- Photocoupler Isolation
- 8-channel Single-ended for analog input.
- Resolution: 12 bit for analog input
- 2-Ethernet switch
- 2-sim
- Micro-SD
- Watchdog
- Cost-effective
- Wide Operating Temperature Range: -25 °C ~ +75 °C

➤ CELLULAR INTERFACE

- Standards: GSM/GPRS/EDGE/UMTS/HSPA/FDD LTE
- GPRS/EDGE: 850/900/1800/1900 MHz
- HSUPA: 900/2100 or 850/1900 MHz optional, DL/UL 7.2/5.76 Mbps, fallback to 2G.
- HSPA+: 850/900/1900/2100 or 900/2100 or 850/1900 MHz optional, DL/UL 14.4/5.76 Mbps, fallback to 2G, FDD LTE: 800/900/1800/2100/2600 MHz or 700MHz (B17 or B13) optional, DL/UL 100/50 Mbps, fallback to 3G/2G.
- SIM: 2 x (3V & 1.8V)
- Antenna Interface: SMA Female, 50 ohms impedance. 32-bit high performance microcontroller MCU

➤ IO SPECIFICATIONS

Digital Input		
Input Channels	16	
Type	Wet Contact (Sink)	
On Voltage Level	+12.0 VDC ~30 VDC	
Off Voltage Level	+11 V max.	
Input Impedance	10 K Ω , 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 Input		
Input Channels	8	
Type	0 ~ 20 mA/ 4 ~ 20 mA	
Resolution	12-bit	
Sampling Rate	100 Hz total	
Accuracy	+/-0.1%	
Zero Drift	+/- 20 μ V/ $^{\circ}$ C	
Span Drift	+/- 25 ppm/ $^{\circ}$ C	
Input Impedance	Voltage	10 M Ω
	Current	100 Ω
Overvoltage Protection	120 VDC	
Open Wire Detection for 4 ~ 20 mA	Yes	

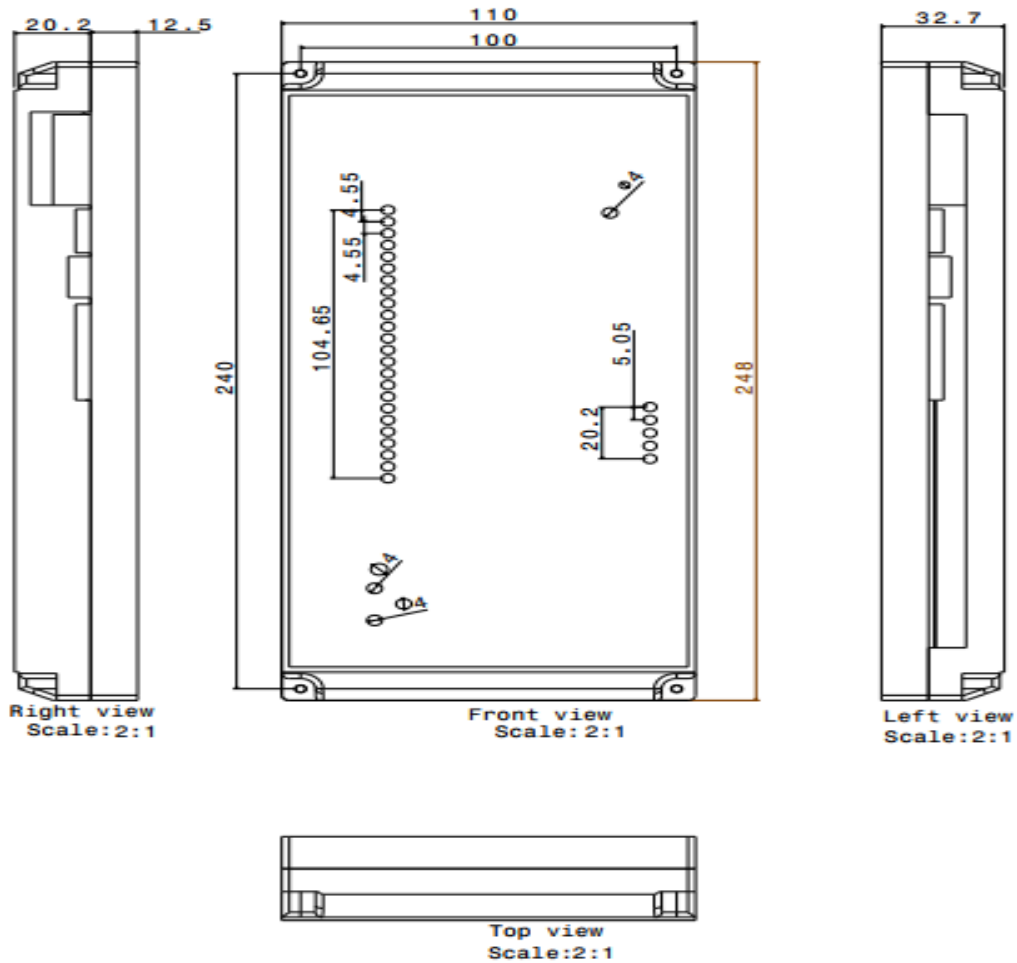
➤ SYSTEM SPECIFICATIONS

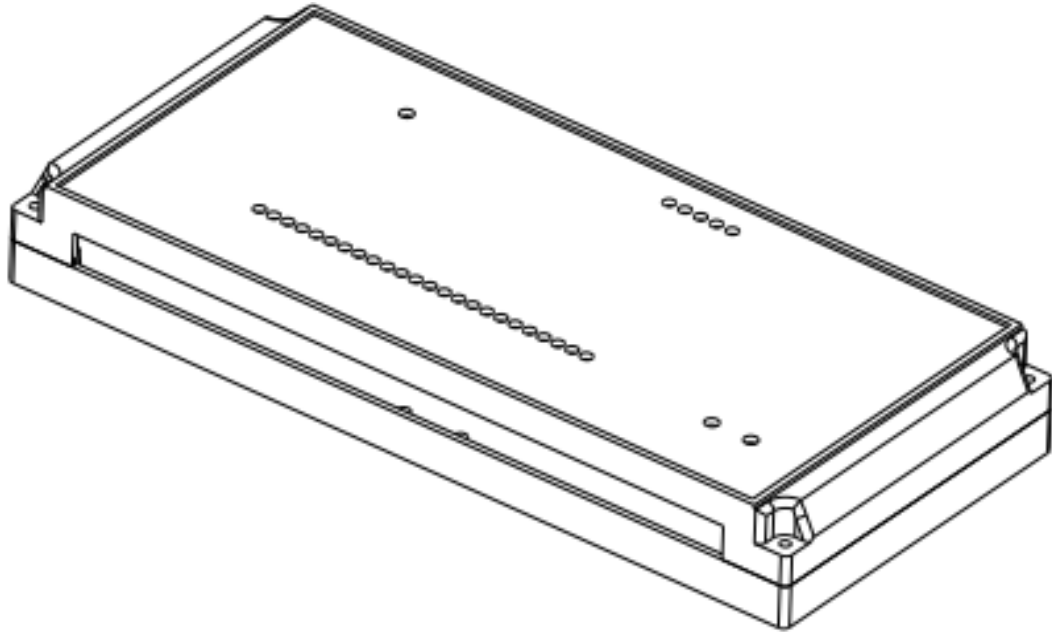
COMMUNICATION	
Interface	RS485, RS232, HART
Format	(N, 8, 1), (N, 8, 2), (O, 8, 1), (E, 8, 1)
Baud Rate	1200 ~ 115200 bps
Protocol	Modbus/RTU
Watchdog	Yes
POWER REQUIREMENTS	
Reverse Polarity Protection	Yes
Powered from Terminal Block	Yes, 12 ~ 30 VDC
Consumption	0.5 W Max.
ENVIRONMENT	
Operating Temperature	-25 °C ~ +75 °C
Storage Temperature	-30 °C ~ +75 °C
Humidity	10 ~ 95% RH, Non-condensing

➤ APPLICATIONS

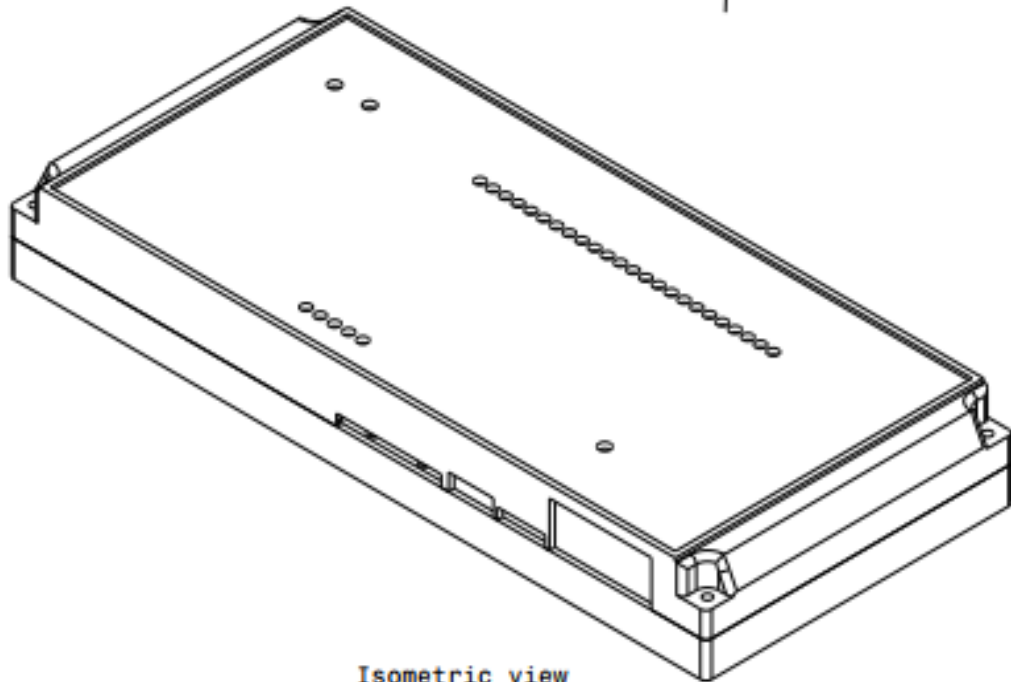
- Industrial Automation
- Industrial Machinery
- Building Automation
- Food and Beverage Systems
- Semiconductor Fabrication
- Control Systems

➤ DIMENSION DIAGRAM



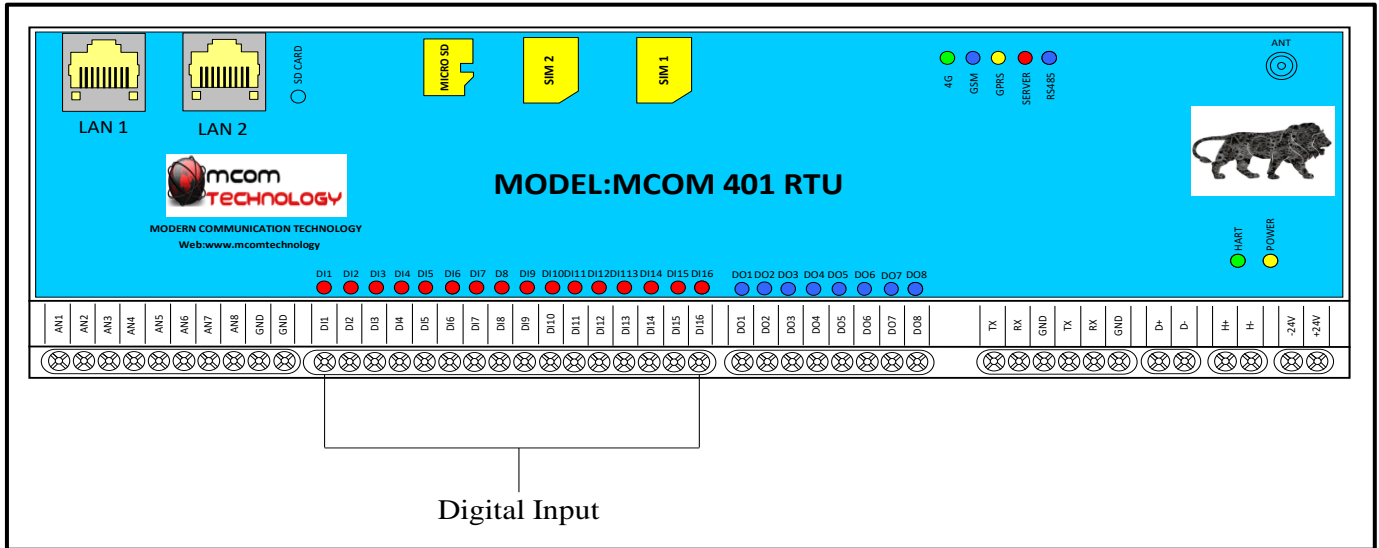


Isometric view
Scale:2:1

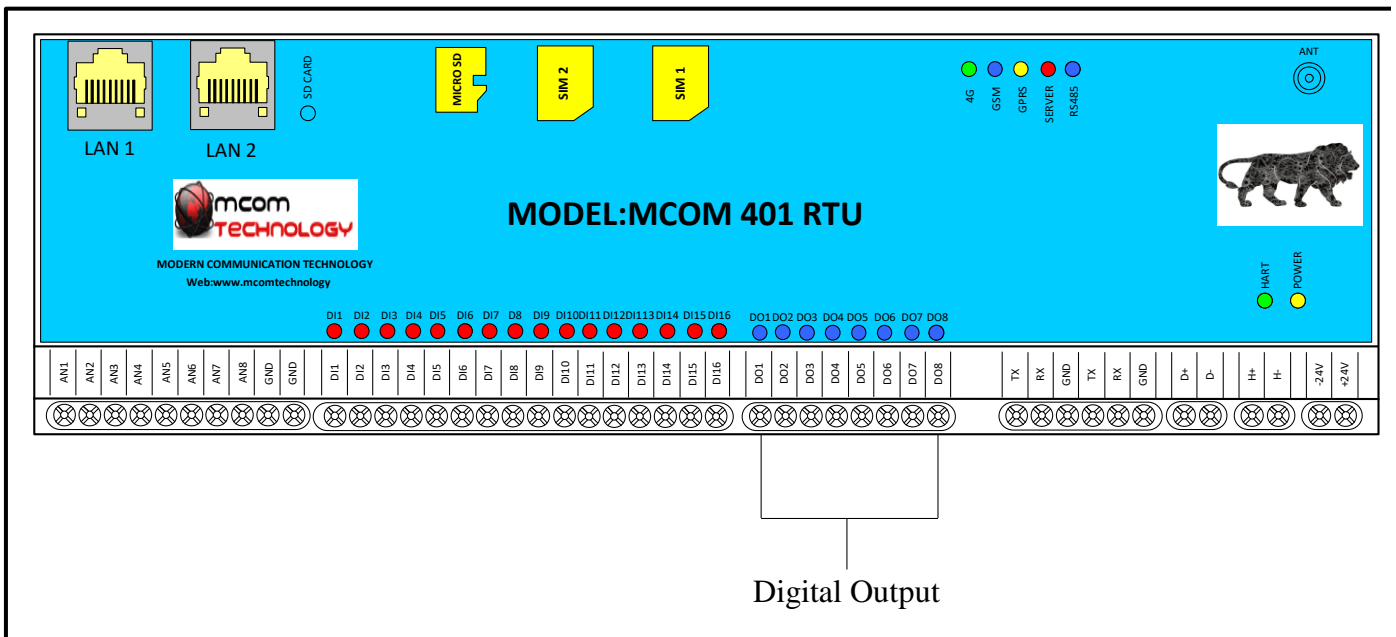


Isometric view
Scale:2:1

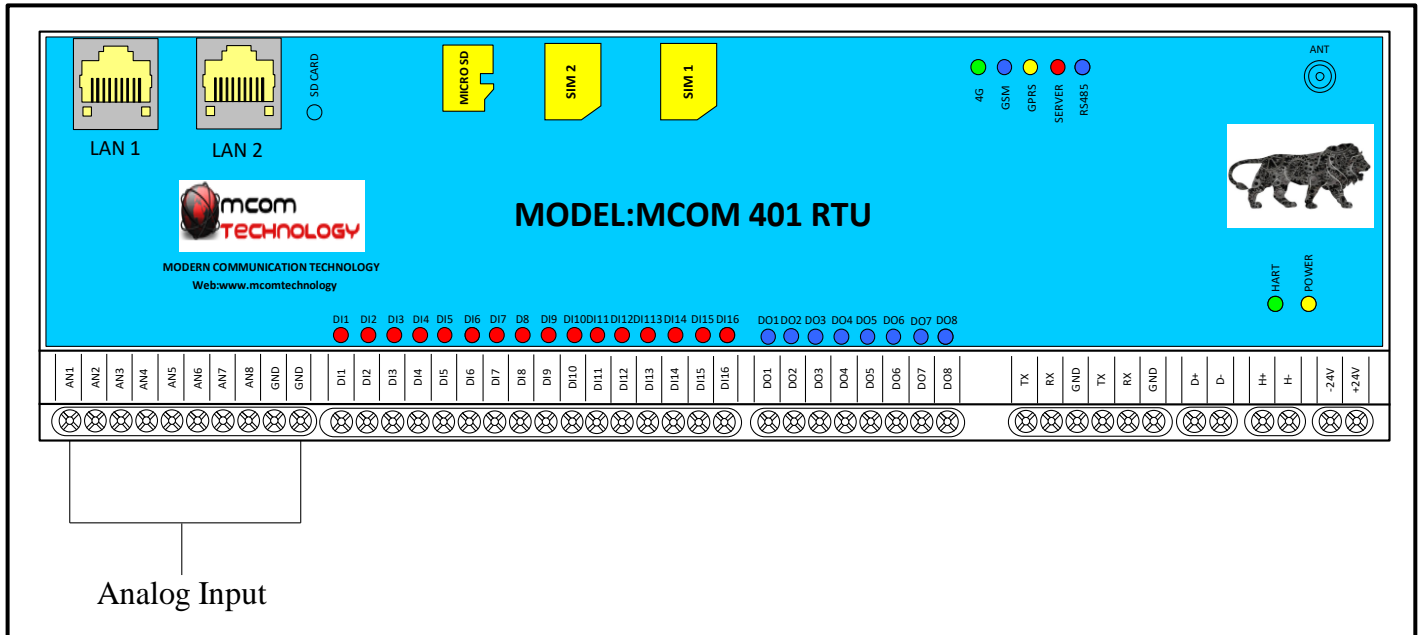
➤ DIGITAL INPUT



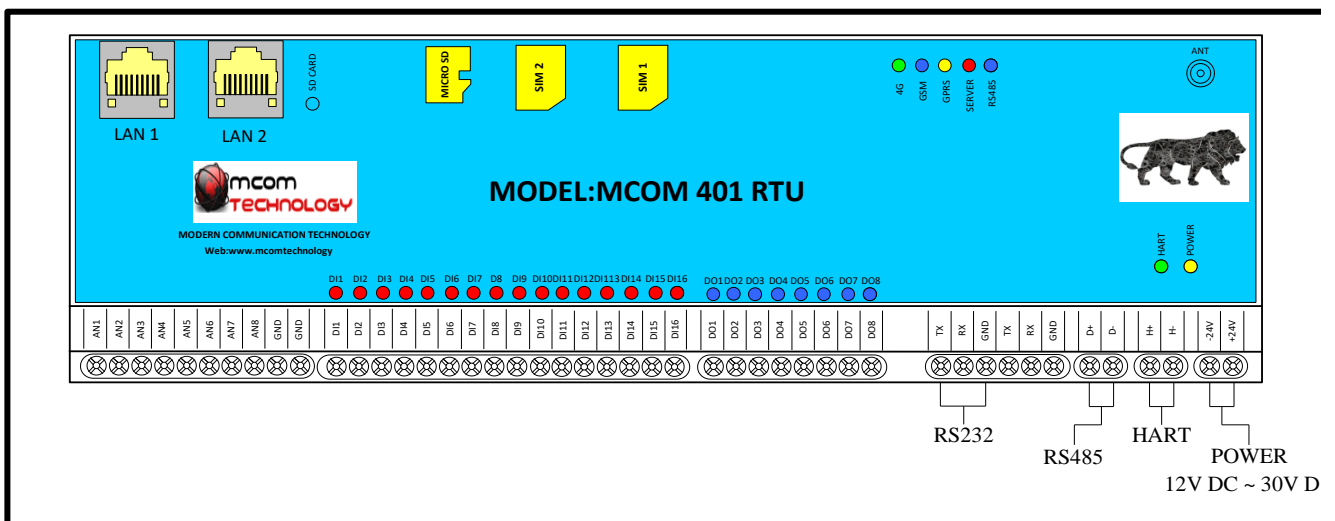
➤ DIGITAL OUTPUT



➤ ANALOG INPUT



➤ POWER, RS232, RS485 & HART



MODERN COMMUNICATION TECHNOLOGY

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