

Your vision, automated



MCOM401DL

**4G, 3G, 2G, IOT BASED RS232/RS485
DUAL SIM MODEM**



The MCOM401DL is a rugged industrial cellular modem designed for reliable M2M communication, enabling real-time monitoring and control of remote PLCs, RTUs, and MODBUS devices. Operating in transparent mode with a minimum 1-second data update rate, it supports global cellular standards including GSM/GPRS/EDGE/UMTS/HSPA/FDD LTE and offers flexible serial communication through RS232 and RS485 interfaces.

The integrated Dual SIM architecture enhances network availability through Automatic SIM Failover and Manual SIM Selection, ensuring uninterrupted and reliable communication in remote and mission-critical applications. Equipped with 2 Analog Inputs (AI), 4 Digital Inputs (DI), 2 Digital Outputs (DO), the modem provides efficient data acquisition and remote control capabilities for industrial field devices. Additionally, the modem features a Micro SD card slot and 128 MB on-board Flash Memory, providing local data storage and buffering capabilities for enhanced system reliability. Its robust industrial design, wide input voltage range, and multiple status LEDs make it ideal for industrial automation, energy monitoring, water metering, distribution automation, and remote telemetry applications.

➤ 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) Automatic SIM failover
- Memory: 128 MB onboard flash memory
- External Storage: Micro SD Card Support
- Antenna Interface: SMA Female, 50 ohms impedance.32-bit high performance microcontroller MCU.

| SERIAL COMMUNICATION | |
|---------------------------------|---|
| Interface standard and protocol | RS485, RS232 and MODBUS RTU |
| Communication address | 1 TO 32 |
| Transmission mode | Half duplex, Full duplex |
| Transmission distance | 1000m for RS485 and 15m for RS232 |
| Transmission speed | 300, 600, 1200, 2400, 4800, 9600,19200 (in bps) |
| Data type | Integer, Float, Hex |
| Parity | None, Odd, Even |
| Stop bit | 1 or 2 |
| Response time | 1000ms |

| Performance Parameters | |
|------------------------|---|
| Operating Temperature | -25 to 85°C |
| Storage Temperature | -40 to 85°C |
| Humidity | 5 to 95% RH |
| Input Voltage | 10 to 40 VDC |
| Power Consumption | Idle: 100 mA @ 12 V, Data Link: 500 to 1000 mA (peak) @ 12V |
| Dimension (L x W x H) | 110 x 70 x 35 mm |

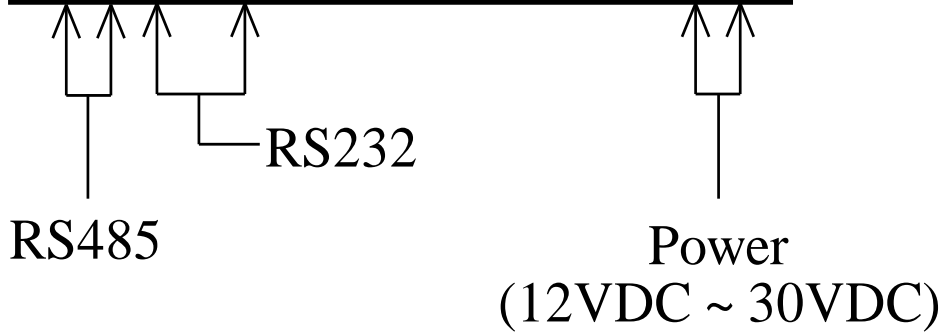
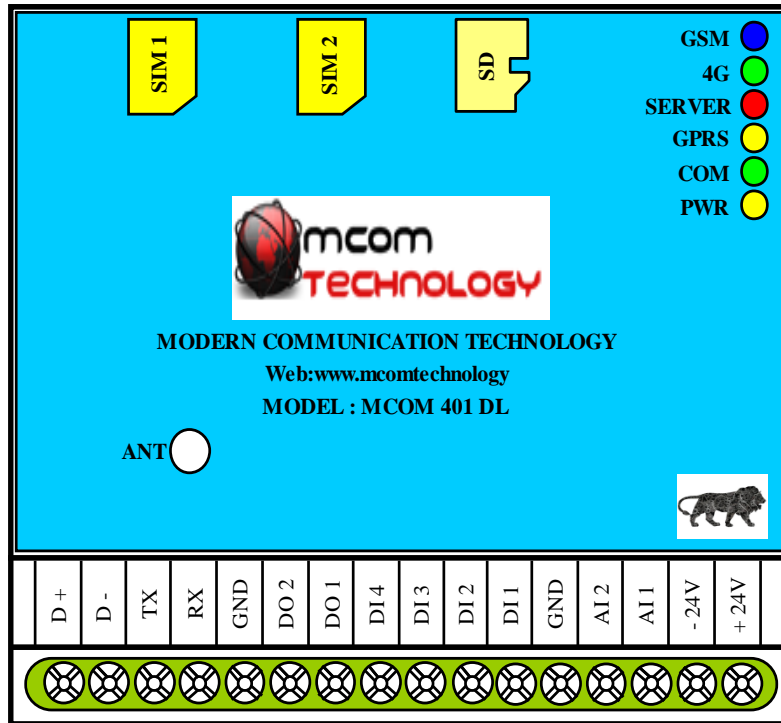
➤ FEATURES

- Dual SIM Support (2 × SIM Slots)
- Automatic SIM Failover
- Manual SIM Selection
- Supports all types of 4G SIM Cards
- Supports M2M SIM Cards
- 4G / 3G / 2G Auto-Switching
- RS232 & RS485 Communication
- MODBUS RTU Compatible
- Transparent Data Transmission Mode
- High Reliability Industrial Design
- Wide Input Supply Range (10 ~ 40 VDC)
- LED Status Indicators for System Monitoring
- SMA Antenna Interface

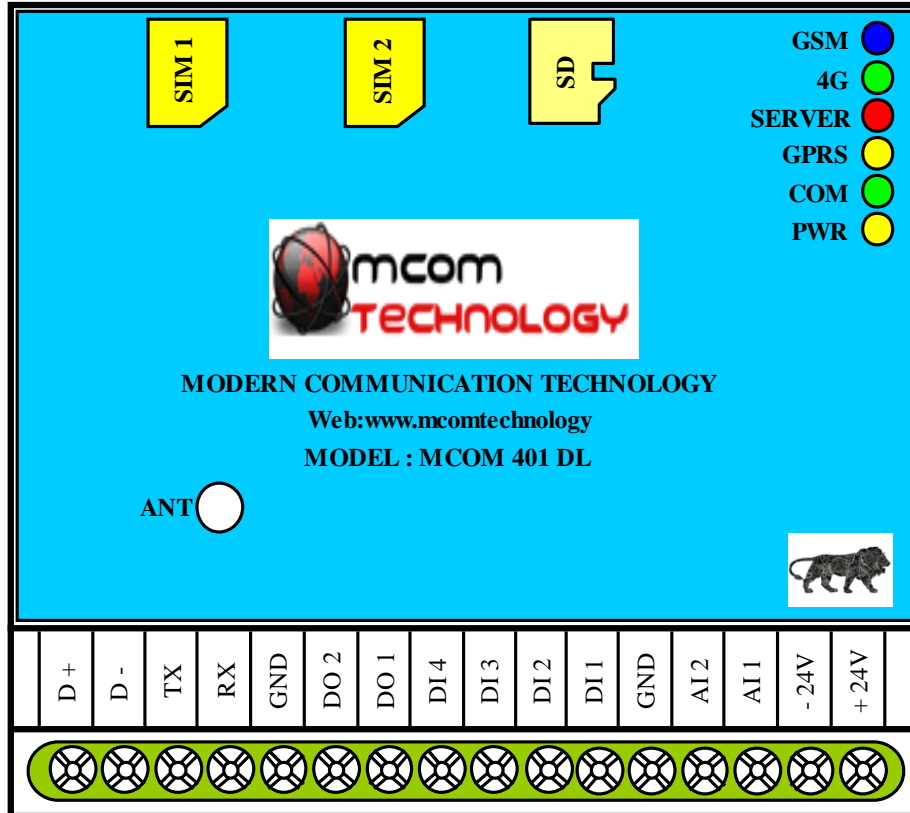
➤ APPLICATIONS

- PLC/MODBUS Device Monitoring & Control
- Industrial Automation
- Remote Telemetry Systems
- Energy Monitoring (Solar, Wind & Electrical)
- Water Metering & Flow Meter Applications
- Distribution Automation
- Automatic Meter Reading (AMR)
- Remote Equipment Monitoring
- Smart Utility Management

➤ POWER, RS232 & RS485

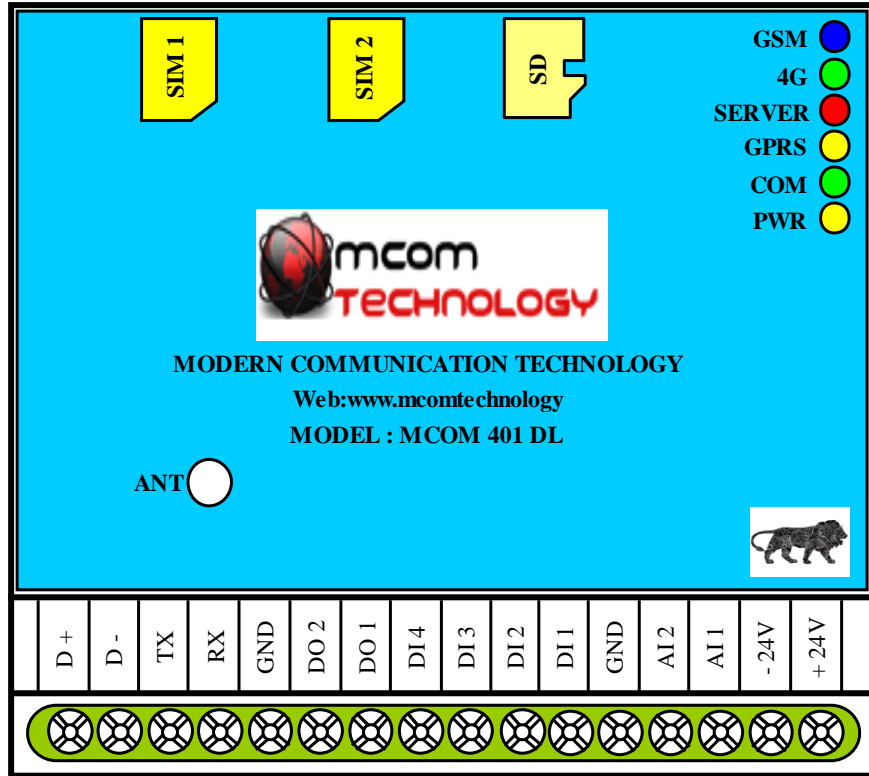


➤ ANALOG INPUT



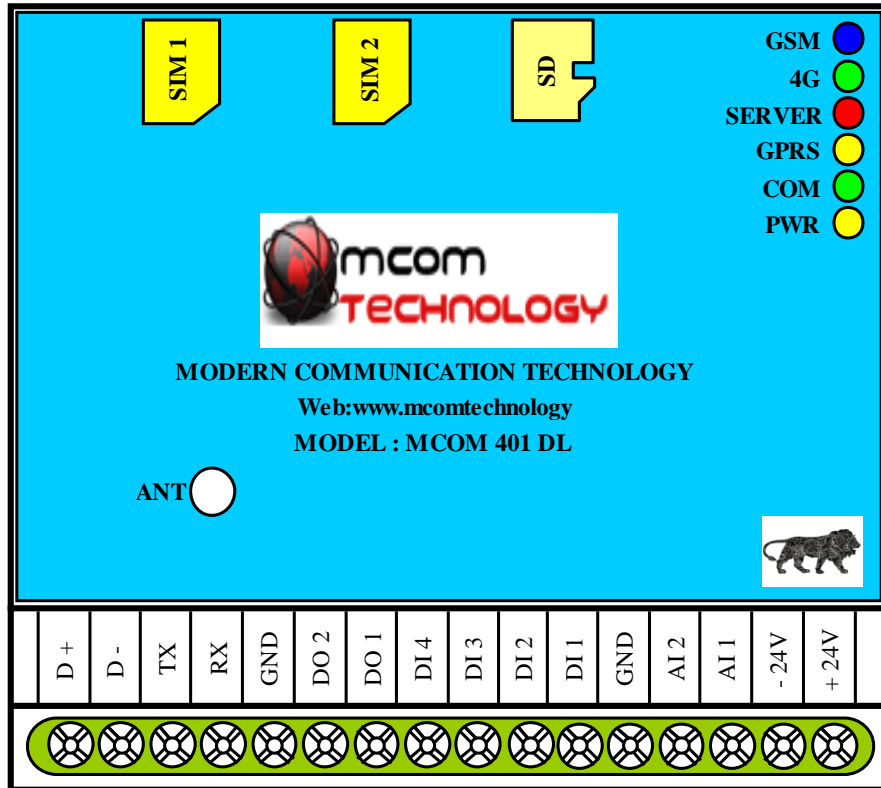
Analog Input

➤ DIGITAL INPUT



Digital Input

➤ DIGITAL OUTPUT



Digital Output