

Your vision, automated



MCOM300BAT

INDUSTRIAL BATTERY POWERED CONTROLLERS



The MCOM300BAT is a compact, battery-powered wireless RTU designed for long-term remote monitoring. With ultra-low power consumption, an integrated GSM/GPRS modem, and built-in data logging, it provides reliable performance in remote and unmanned locations. Its rugged IP65/IP67 enclosure and high-capacity Lithium Thionyl Chloride battery ensure up to 4 years of reliable, long-term autonomous performance, making it ideal for water management, industrial monitoring, and utility applications.

➤ CELLULAR INTERFACE

1. Standards: GSM/GPRS/EDGE
2. GPRS: max. 86 kbps (DL & UL), class 10
3. EDGE: max. 236.8 kbps (DL & UL), class 12
4. Frequency: 850/900/1800/1900 MHz for GPRS/EDGE
5. CSD: Up to 14.4 kbps
6. SIM: 1 x (3V & 1.8V)
7. Antenna Interface: SMA Female

➤ FEATURES

- Ultra-low power wireless RTU
- Integrated GSM/GPRS modem
- On-board data logging with configurable intervals
- SMS-based alarms for critical events
- Battery-powered operation (Li-SOCl₂ battery)
- Compact field-mountable enclosure
- Easy installation & minimum maintenance
- Suitable for remote and isolated locations
- MCOM300 utilizes dual processor architecture in order to combine extreme low power consumption with advanced processing and communication capabilities. A system controller (ultra-low power MCU) is in continuous operation scanning the digital inputs for alarm condition detection. A powerful communication processor, switched on and off by the system controller, performs all data processing and controls communications through the internal wireless MODEM.

➤ TECHNICAL SPECIFICATIONS

1. Inputs/Outputs

- Pulse Input: 1 channel
- Analog Input: 1 channel (0 – 20mA/ 4 - 20 mA)
- Counter Input: 1 counter, 100 Hz max

2. Communication

- GSM/GPRS Modem
- SMS alerts for alarms

3. Power supply & consumption

- Power Supply Interface: 2-pin 5mm pluggable terminal block
- Input Voltage: 9 to 36 VDC
- Power Consumption: Idle: 50-60 mA @ 12 V
- Data Link: 100 to 200 mA (peak) @ 12 V
- Power source: Lithium Thionyl Chloride battery
- Battery life: Up to 4 years (depending on transmission frequency)

4. System

- LED Indicators: Power, GSM.
- Real Time Clock: Built-in RTC with button battery
- Watchdog and Timer: Built-in watchdog and timer

5. Environmental specification

- Operating Temperature: –20°C to +70°C
- Storage Temperature: –30°C to +80°C
- Humidity: 0–95% non-condensing
- Ingress Protection: IP65 / IP67

6. Mechanical

- Enclosure: Industrial grade ABS/Polycarbonate
- Mounting: Wall mount
- Dimensions: 181 × 130 × 102 mm (L x W x H)
- Housing & Weight: IP65 ABS, 800g

7. Data logging

- Built-in non-volatile memory
- Configurable log interval (1 sec to 1 hour)
- Log retention even on power loss

➤ APPLICATIONS

- Water flow and pressure monitoring
- Remote tank level monitoring
- Energy metering and utility logging
- Industrial automation
- Pumping station monitoring
- Leakage detection systems
- Irrigation monitoring

➤ SETUP AND REMOTE CONFIGURATION

The unit can be programmed locally through the serial port or remotely via SMS by using simple ASCII configuration commands. The command set features commands for configuring input alarm parameters, scaling parameters and alarm limits, timing parameters and defining user. MCOM300BAT can be remotely reconfigured by sending configuration commands via SMS to the unit during the periodical status message processing.

MODERN COMMUNICATION TECHNOLOGY

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