

- GSM/GPRS packet transmission
- Integral GSM 900 / 1800 modem
- Binary inputs and outputs (8/8)
- Analog inputs 4-20 mA (2)
- Serial communication port for external data sources
- Support for standard transmission protocols
- Data logger
- Removable terminal blocks
- Easy configuration software



Designed according to the latest technologies Telemetry Module MT-101 is a dedicated, professional market oriented device for data transmission over GSM/GPRS network in all available technologies. Compact design, integral GSM modem and well structured I/O set guarantees full usability not only in small, telemetry and security systems but also in scalable, multinode, professional data acquisition systems.

Resources

- 8 optoisolated binary inputs/counters 24V DC (I1 – I8)
- 8 configurable binary outputs/inputs/counters 24V DC (Q1 – Q8)
- 2 optoisolated analog inputs 4-20 mA (8 bit acc./10 bit res..) with configurable hysteresis and filtration
- Isolated serial port RS232/485/422
- Remotely updatable firmware Flash memory
- Externally synchronizable RTC (clock)



Functionality

- Transmission modes
 - GPRS – packet transmission
 - SMS
 - CSD – circuit switched transmission (modem only)
- All binary inputs can be configured as counters or f/analog converters (0-2kHz)
- Configuration of simple control functions using I/O's and configurable, event triggered flags (SMS sending, data sending/logging, output control, call in)
- Unsolicited messaging
- Event triggered Data Logger
- Dynamic SMS text insertion
- Simple, multipoint alarm configuration for both binary and analog inputs
- Additional manual alarm level setting capability for analog inputs AI1, AI2 (front panel push buttons)
- External, optoisolated RS 232/422/485 serial port for data transmission
- Serial port emulated protocols in GPRS mode:
 - MODBUS RTU (Master and Slave)
 - Transparent, intelligent modem
- Smart MODBUS RTU routing
- Multibroadcast for transparent mode
- Local or remote (via GPRS) configuration
- Configurable access security – IP and Tel# list , optional password
- DIN rail mounting
- Power supply 12/24V DC, 24 V AC
- Removable terminal blocks
- Status LED's (status, GSM transmission activity, GSM signal level, GPRS activity, serial communication activity, I/O status)

General

| | |
|-------------------------------------------------------|---------------|
| Dimensions(length x width x height) | 105x86x60 mm |
| Weight | 300 g |
| Fixing | DIN Rail 35mm |
| Operating temperature | -20 ... +55°C |
| Protection class | IP40 |
| Maximum voltage between any contact and device ground | 60Vrms max. |

GSM/GPRS Modem

| | |
|---------------------------------|-------------------------------------------------------------------------------|
| Modem type | WISMO Quick |
| GSM | Dual Band GSM/GPRS module EGSM900/1800 |
| Frequency range (EGSM 900 MHz) | Transmitter: from 880 MHz to 915 MHz Receiver: from 925 MHz to 960 MHz |
| Output power (EGSM 900 MHz) | 33 dBm (2W) – Class 4 |
| Frequency range (EGSM 1800 MHz) | Transmitter: from 1710 MHz to 1785 MHz Receiver: from 1805 MHz to 1880 MHz |
| Output power (EGSM 1800 MHz) | 30 dBm (1W) – Class 1 |
| Modulation | 0,3 GMSK |
| Channel spacing | 200 kHz |
| Antenna | 50Ω |

Power supply

| | | | |
|--------------------------------|----------------|--------|------|
| DC (12V, 24V) | 10,8 ... 36 V | | |
| AC (24V) | 18...26,4 Vrms | | |
| Input current (A) (for 12V DC) | Idle | Active | Max |
| | 0,10 | 0,35 | 0,60 |
| Input current (A) (for 24V DC) | Idle | Active | Max |
| | 0,05 | 0,17 | 0,30 |

Inputs I1...I8

| | |
|-----------------------|---------------|
| Input voltage range | -36 ... 36 V |
| Input resistance | 5,4 kΩ |
| Input voltage ON (1) | > 9V or < -9V |
| Input voltage OFF (0) | -3V ... 3V |

Inputs / Outputs Q1...Q8

Inputs

| | |
|-----------------------|-------------|
| Maximum input voltage | 36V |
| Input resistance | 5,4 kΩ typ. |
| Input voltage ON | > 9V min. |
| Input voltage OFF | < 3V max. |

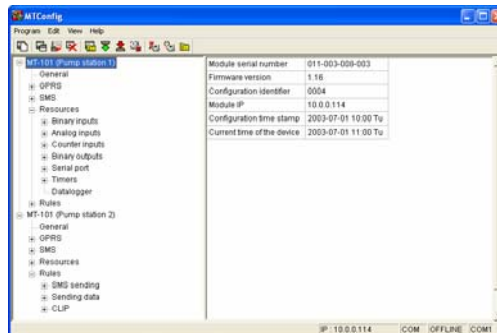
Outputs

| | |
|----------------------------------------------|--------------|
| Recommended mean current for a single output | 50mA |
| Single output current | 350mA max. |
| Mean current for all outputs | 400mA max. |
| Voltage drop at 350mA | <3,5V max. |
| Off state current | < 0,2mA max. |

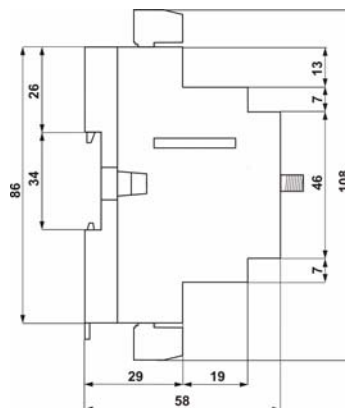
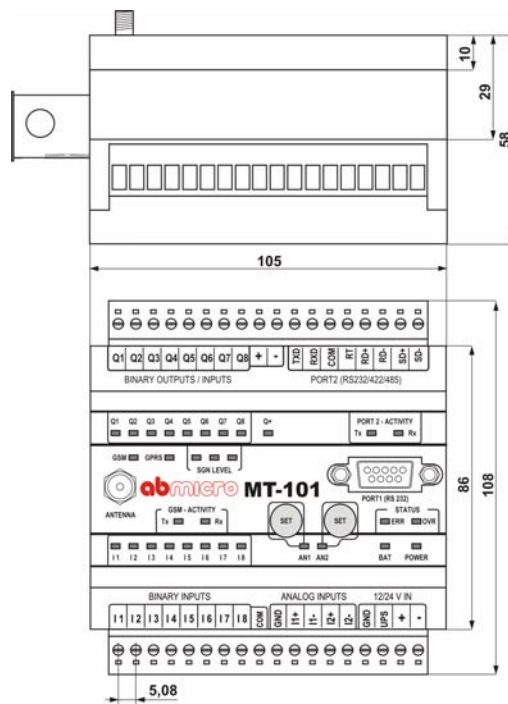
Analog inputs AN1,AN2 (4...20 mA)

| | |
|-------------------------|-------------|
| Input current | 4 ... 20 mA |
| Maximum input current | 50 mA max. |
| Dynamic input impedance | 25Ω typ. |
| Voltage drop at 20mA | < 5V max. |
| A/D converter | 10 bits |
| Accuracy | ±1,5% max. |
| Nonlinearity | ±1% max. |

Configuration utility



Drawings and dimensions



All dimensions in millimeters.

Additional info:

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