

- GSM/GPRS packet transmission
- Integral GSM 900 / 1800 modem with automatic login onto GPRS network
- Isolated serial communication port for external devices (RS 232/422/485)
- Programmable functions for data processing
- Standard communication protocols (MODBUS RTU, M-BUS, NMEA 0183)
- Built-in Master and Slave functionality
- FlexSerial mode for program based protocol handling
- Data mirror of external resources and event triggered transmission (unsolicited messaging)



MT-202 module has been designed for easy, wireless integration via GPRS network of various remote intelligent devices (e.g. PLC controllers, I/O stations, measuring devices, operator panels) equipped with serial port RS-232/422/485.

MT-202 can be used as wireless, "transparent" serial port, but it can also play a role of a local Master querying periodically an external device for user defined resources (e.g. inputs, outputs, analog inputs, internal registers and flags). In such case MT-202 creates in memory a mirror of the external resources and detects alarms, state changes, analog value changes and fulfilled logic conditions incorporating raw and calculated values. Data are transmitted via GPRS according to user defined rules.

Industrial grade design, integral GSM/GPRS modem, user programming capabilities, attractive technical features and easy to use configuration tools - these are important advantages of MT-202 in applications of wireless telemetry, maintenance, diagnostic, control and automated meter reading (AMR).



Resources

- Isolated serial port RS-232/485/422
- User program accessible internal flags and registers:
 - ✓ 512 internal 16-bit registers
 - ✓ 176 internal flags in binary output space
 - ✓ 256 internal retentive flags
 - ✓ 256 internal non-retentive flags
 - ✓ 12 independent internal timers
 - ✓ 32 special purpose flags for triggering alarm and event messages
- Firmware Flash memory with remote update capability
- Real Time Clock (RTC) with external synchronization functions
- Power backup detection input

Functionality

- Transmission modes:
 - GPRS - packet transmission
 - SMS
 - CSD - circuit switched data transmission (in modem mode only)
- Access to internal resources with standard MODBUS RTU protocol
- Intelligent packet routing and Multimaster operation in MODBUS mode
- Packet routing in transparent mode
- Wireless serial port capability in transparent mode
- Event triggered GPRS transmission (unsolicited messaging)
- Programmable logic functions using markers, timers, counters, diagnostic flags and registers for event triggering (data transmission, SMS and e-mail sending, setting values of markers and internal registers)
- Unsolicited messages triggered by change of marker state or fulfilled logic condition
- Time-based and event-based SMS messages
- Automatic update of dynamic fields in SMS message
- Functionality of local Master for slave devices connected to the serial communication port RS-232/422/485
- External resources mapping (mirroring) for event detection and triggering
- Programmable handling of non-standard communication protocols - FlexSerial mode
- MT2MT buffer for direct data sharing between MT-202, MT-101 and MT-102 telemetry modules.

- Built-in data integrity and frame delivery checking
- "Watchdog" circuitry - automatic reset in case of abnormal state
- Timers synchronized with RTC
- Local and remote (via GPRS) configuration, programming and firmware update
- Configurable security settings - list of authorized IP addresses and tel. numbers, access passwords
- DIN rail mounting
- Power supply 12/24V DC, 24 V AC
- Removable terminal blocks
- Diagnostic LEDs (module status, GSM transmission activity, GSM signal level, GPRS activity, serial communication activity)
- User-friendly configuration tools

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) - stacja klasy 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) - stacja klasy 1
Modulation	0,3 GMSK
Channel spacing	200 kHz
Antenna	50Ω

Power supply

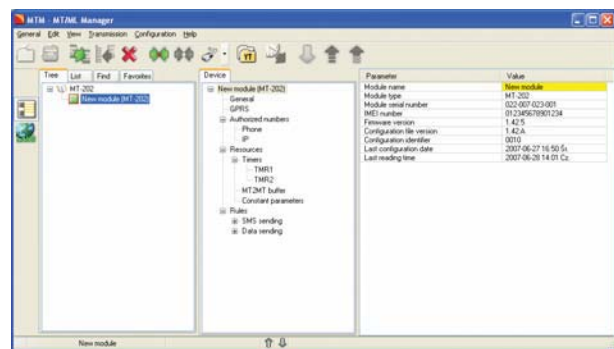
DC (12V, 24V)	10,8 ... 36 V		
AC (24V)	18...26,4 Vrms		
Input current (A) (for 12V DC)	Idle 0,10	Active 0,60	Max 1,90
Input current (A) (for 24V DC)	Idle 0,06	Active 0,25	Max 1,00

Additional info:

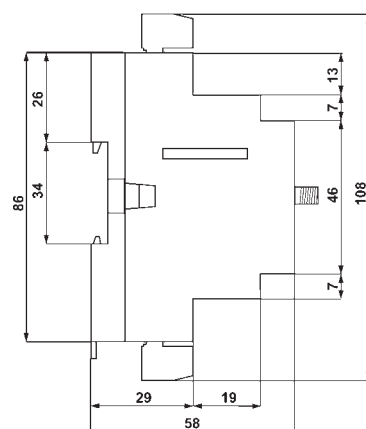
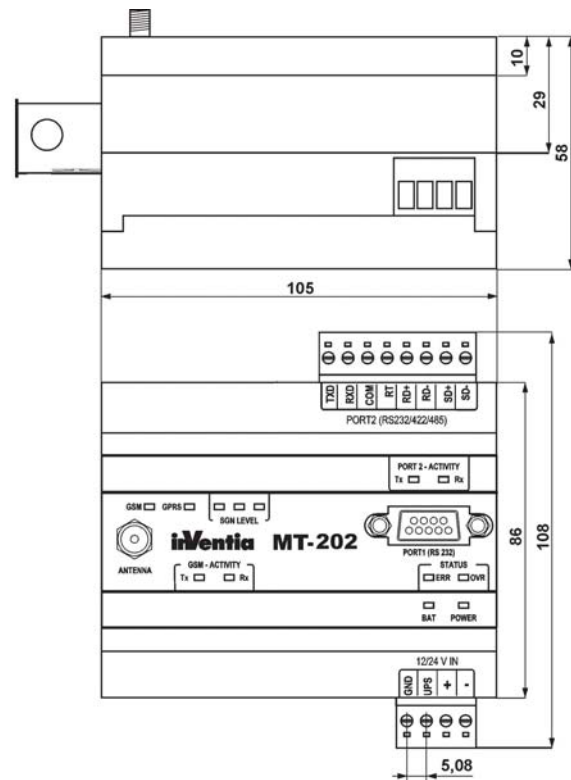
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Configuration utility



Drawings and dimensions (in millimeters)



MT-202



INVENTIA complies with ISO 9001:2000 certified Quality Management System!
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