



Communication unit MEg202.5



CHARACTERISTICS

The communication unit MEG202.5 in its basic configuration provides remote transmission of states or changes of binary inputs and commands by GSM/GPRS, UMTS/HSPA and LTE networks of mobile operators. The measured values are transferred through the serial communication line RS485 from connected measuring devices. It implements the standardized communication protocol according to EN 60870-5-104:2006 standard and enable the connected devices to be integrated in the SCADA system either directly or by means of data concentrators.

The MEG202.5 unit contains a processor that communicates with connected devices, optimizes and controls the data transmission, provided for pre-processing the data readout from the measuring devices, supervises the connected devices and in case of an event it conveys the information to the superior system.

The MEG202.5 unit can be used also in the function of a communication converter GPRS/UMTS/HSPA/LTE on RS485 bus when the data sent through the mobile operator network are re-sent in transparent mode to the programmed RS485 channel and conversely, the data from RS485 are sent back.

The basic functional setting of the units is configured by the manufacturer. The setup change can be made by program M202 Param.



TECHNICAL PARAMETERS

Power supply: $+12\text{ V} \pm 10\% / 200\text{ mA} + 1.25 * (I_{\text{CHAN1}} + I_{\text{CHAN2}})$
where I_{CHAN1} , I_{CHAN2} are currents for supply channels CHAN1
and CHAN2

Operation temperature: -20°C to $+60^\circ\text{C}$

Dimensions and weight, construction

Length x Width x Height: $54 \times 90 \times 63\text{ mm}$ Weight: 0.2 kg

The unit is constructed for installation on the DIN rail, TC 35 type.

GSM communication

GSM/GPRS module:

Dual-band EGSM 900/1800 MHz

Optionally Quad-band 850/900/1800/1900 MHz

GPRS class 10

Module GSM/UMTS/HSPA:

Dual-band 900/1800 MHz (GPRS/EDGE), 900/2100 MHz (UMTS/HSPA)

Optionally dual-band 850/1900 MHz (GPRS/EDGE and UMTS/HSPA)

Technical specification equipment by 3GPP: GPRS/EDGE class 33

HSPA category 8 downlink, 6 uplink

Module LTE:

GPRS/EDGE 900/1800 MHz

UMTS/HSPA+ 850/900/2100 MHz

LTE 800/1800/2600 MHz – 100/50 Mbps

Supported protocols: UDP, TCP, ICMP, SMTP, MODBUS, IEC 60870-5-104

Antennas:

GSM antenna Magnetic 50, Dual-band, 5 dB, vertical polarization, radiation H-360°, V-30°, dimension of antenna $\varnothing 40\text{ mm} \times 300\text{ mm}$, length of main cable 3 m, connector SMA(m) $\varnothing 9\text{ mm}$.

GSM antenna Magnetic 50, Dual-band, 9 dB, vertical polarization, radiation H-360°, V-30°, dimension of antenna $\varnothing 62\text{ mm} \times 420\text{ mm}$, length of main cable 3.5 m, connector SMA(m) $\varnothing 9\text{ mm}$. Possibility to use the extension by cable RG58 with length 10 m.

GSM antenna YAGI120, Dual-band, 12 dB, vertical polarization, radiation H-250°, V-30°, dimension of antenna $300 \times 200 \times 26.4\text{ mm}$, coaxial cable with length 10 m, connector SMA(m) $\varnothing 9\text{ mm}$, weight is 0.86 kg.

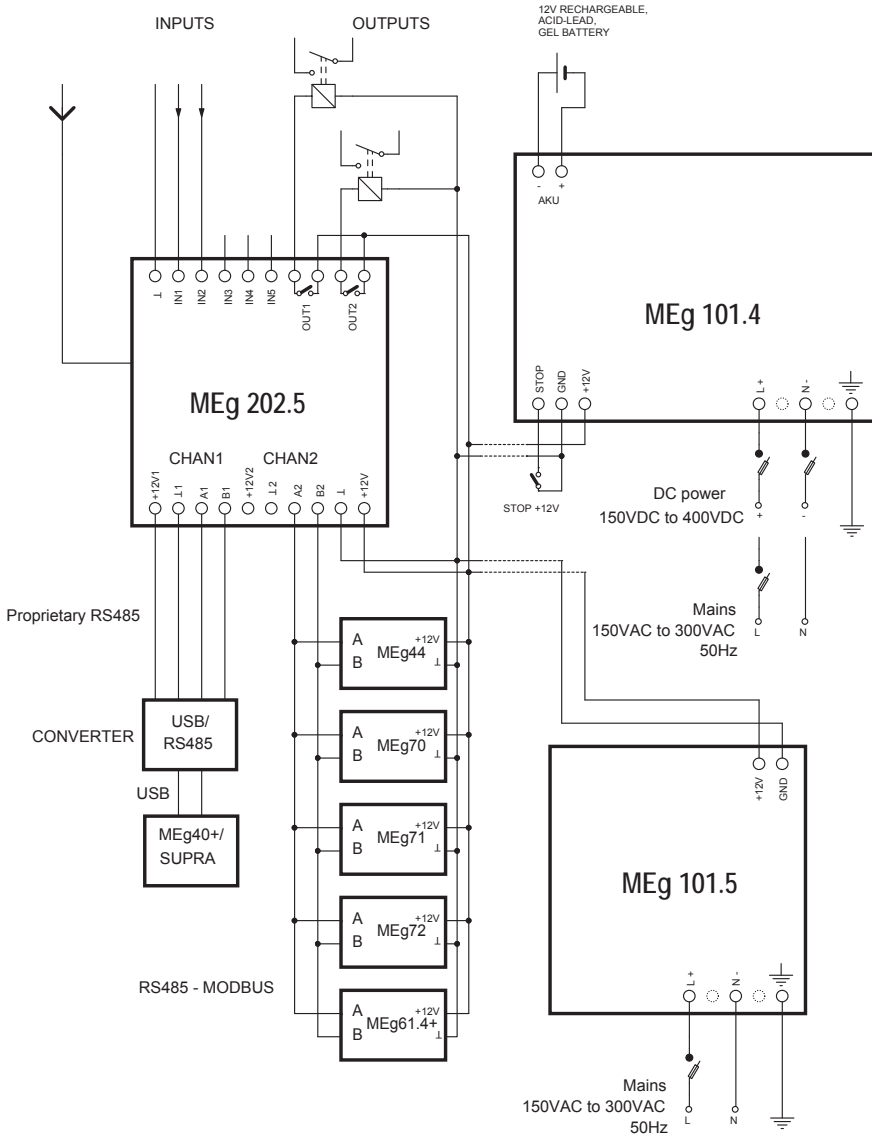
MEg202.5 communication with instruments

2 x RS485 interface, max. Baud rate 115.2 kBd

Number of digital galvanically non-isolated inputs: 5 (12V voltage from MEg202.5)

Number of outputs implemented by relay switch contact: 2 (max. 30 V_{DC} , 30 mA_{DC})

Example of MEG202.5 communication unit wiring



Manufacturer

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