

MT 416 - PROGRAMMABLE AC VOLTAGE TRANSDUCER



MT416 is intended for measuring and monitoring single-phase electrical power network. Voltage input is electrically isolated from the system by means of voltage transformer. It measures true RMS voltage value by means of fast sampling of voltage signals, which makes instruments suitable for acquisition of transient events. A built-in microcontroller calculates measurands (voltage, frequency, THD U, MD) from the measured signals. Measurands (U, f) can be then converted into load independent DC current or voltage which is proportional to the true RMS measured value for the purpose of regulation of analogue and/or digital devices.

APPLICATION

The MT416 voltage transducer is used for a permanent monitoring of a single-phase voltage and frequency values. MT416 is delivered configured to default values. Subsequent customer configuration is possible with user friendly setting software MiQen. MT416 supports standard serial RS232/485 with speed up to 115200 bps. USB 2.0 can be used for a fast set-up or memory acquisition (after installation USB connection is not possible any more). Additional USB 2.0 interface can only be used for a fast set-up without need for auxiliary power supply. This interface is NOT galvanically isolated from analogue output and can be used ONLY unconnected to aux. supply and measuring inputs.

Features:

- True RMS AC voltage measurements
- Voltage auto range measurements up to 600 VL-N
- Frequency measurement range 16 - 400 Hz
- AC or universal wide auxiliary power supply range 24 - 300 Vdc, 40 - 276 Vac
- Accuracy class 0.5 (EN 60688)
- Serial (RS232 or RS485) communication
- Sophisticated analogue output; 2 voltage and 4 current ranges, non-linear characteristics ...
- Simple USB setting without auxiliary power supply

PROPERTIES

- Measurements of true RMS voltage, frequency THD U and MD
- Accuracy class 0.5 (EN 60688)
- Input frequency range: 50/60 Hz, 400 Hz
- RS 232/RS 485 communication up to 115, 200 bit/s and USB 2.0 communication
- MODBUS communication protocol
- Universal power supply or transformer power supply
- Automatic range (max. 600 VL-N)
- Housing for DIN rail mounting
- User-friendly PC MiQen software