

OM 501PWR



2003-3-en

- Network analyser - V/A/W(P,Q,S)/Hz/cos φ
- 4 digit programmable projection
- 0...450 V/0...5 A
- Mathematic functions, Digital filters
- Size of DIN 96 x 48 mm
- Power supply 80...250 V AC/DC

Options

Comparators • Data output • Universal analog output • Real time

Description

The OM 501PWR model is a 4 digit universal panel programmable network analyser.

The instrument is based on an 8-bit controller with a converter, that secures high accuracy, stability and easy operation of the instrument.

Standard functions

Programmable display projection

Measuring modes voltage (V_{RMS})
current (A_{RMS})
real power (W)
frequency (Hz)

and with calculation reactive power (Q)
apparent power (S)
power factor (cos φ)

Setting manual, optional projection on the display may be set for maximum value of the input signal in „CM“, e.g.: 0...250 V/0...5 and \Rightarrow 0...1.500 MW ± 9999

Projection

Digital filters

Floating average from 2...10 measurements
Exponen. average from 2...255 measurements
n-th value from 2...255 measurements
Radius of insensitiv. band of suppressed change of measured value

Mathematic functions

Min./max. value registration of min./max. value reached during measurements
Top value the display shows only max. (min.) value for a selected time period
Round up/down setting the projection step for display
Math. operations polynome, 1/x, logarithm, exponential, power, root, sin x

External control

Hold display/instrument blocking
Lock control keys blocking
Resetting MM resetting min/max value to zero

Operation

The instrument is set and controlled by five control keys located on the front panel. All programmable settings of the instrument are realised in two adjusting modes.

Configuration menu (hereinafter referred to as CM) is protected by an optional number code and contains complete instrument setting

User menu may contain arbitrary programming settings defined in „CM“ with another selective restriction (see, change)

All programmable parameters are stored in the EEPROM memory (they hold even after the instrument is switched off). The measured units may be projected on the display.

Options

Comparators are assigned to monitor one, two, three or four limit values with relay output. The user may select limits regime: LIMIT/DOSING/FROM-TO. The limits have adjustable hysteresis within the full range of the display as well as selectable delay of the switch-on in the range of 0...99,9 s. Reaching the preset limits is signalled by LED and simultaneously by the switch-on of the relevant relay.

Data outputs are for their rate and accuracy suitable for transmission of the measured data for further projection or directly into the control systems. We offer an isolated RS232 and RS485 with the DIN MessBus/ASCII protocol.

Analog outputs will find their place in applications where further evaluating or processing of measured data is required in external devices. We offer universal analog output with the option of selection of the type of output - voltage/current. The value of analog output corresponds with the displayed data and its type and range are selectable in CM.

Real time is an internal time control of data collection. It is suitable everywhere where it is necessary to register measured data in a given time segment. Up to 65 000 values may be stored in the instrument's memory. Data transmission into PC via serial interface RS232/485.

