

## OM 371PWR



- **Network analyser - V/A/W(P,Q,S)/Hz/  $\cos \varphi$**
- **4 digit programmable projection**
- **0...450 V/0...5 A**
- **Dual comparator**
- **Size of DIN 96 x 48 mm**
- **Power supply 230 VAC**

### Options

Data output • Universal analogue output • Power supply 24 VAC, 110 VAC, 10...30 VDC

### Description

The OM 371PWR 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 ( $\cos \varphi$ )

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

Projection -999...9999

#### Digital filter

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  
Round up/down setting the projection step for display

#### External control

Hold display/instrument blocking  
Lock control keys blocking

#### Output

Limits 2 relays with switching contact,  
The limits have both adjustable hysteresis and optional delay of the switch-on. Reaching the limits is signalled by LED and at the same time by the switch-on of the relevant relay.

### 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

**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 ASCII protocol.

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

## Technical data

### MEASURING RANGE

Active power output:  $\pm 0 \dots 9999$  W  
 Voltage input: 0...450 V  
 Current input: 0...5 A  
 Frequency range: 40...400 Hz

With converter transformer or shunt, optional power output may be measured up to max.projection 9999.

### PROJECTION

Display: -999...9999, red or green 14-segment LED, digit height 14 mm  
 Decimal point: adjustable - in Configuration menu  
 Brightness: adjustable - in Configuration/User menu

### INSTRUMENT ACCURACY

Tempco: 60 ppm/°C  
 Accuracy:  $\pm 0,5$  % of range  
 Rate: 0,6 - 1,2 - 2,5 - 5 measurements/s  
 Measuring modes: voltage ( $V_{RMS}$ ), current ( $A_{RMS}$ ), power output (W), frequency (Hz) and w/ calculation of Q, S, cos  $\phi$   
 Overload capacity: 10x ( $t < 30$  ms) - does not apply for 450 V and 5 A, 2x (long-term)  
 Watch-dog: reset after 1,2 s  
 Function: Hold/Lock (upon contact), Round up/down  
 Digital filter - adjustable in Configuration menu  
 Calibration: at 25°C and 40 % r.h.

### COMPARATOR

Type: digital, adjustable in programming mode, contact switch-on  $< 30$  ms  
 Limit 1 and 2: -999...3999  
 Hysteresis: 0...999  
 Delay: 0...99,9 s  
 Outputs: 2 relays with switch-on (switch-off) contact (250 VAC/30 VDC, 3 A)  
 - the relay function is adjustable in Configuration menu  
 upon request SSR (250 VAC, 1 A) or open collector may be fitted

### DATA OUTPUTS

Data format: rate 600...115 200 Baud  
 8 bit + no parity + 1 stop bit (ASCII)  
 RS 232: isolated  
 RS 485: isolated, addressing (max. 31 instruments)

### ANALOGUE OUTPUTS

Type: isolated, programmable with resolution max. 10 000 points, analogue output corresponds with the displayed data, output type and range are selectable in CM  
 Non-linearity: 0,2 % of range  
 Tempco: 100 ppm/°C  
 Rate: response to change of value  $< 40$  ms  
 Voltage: 0...2 V/5 V/10 V  
 Current: 0...5 mA/0/4...20 mA (compensation of conduct up to 600 Ohm)

### POWER SUPPLY

24/110/230 VAC, 50/60 Hz,  $\pm 10$  %, 5 VA  
 10...30 VDC/max. 300 mA, (24 VDC/150 mA), isolated  
 - power supply is protected by a fuse inside the instruments

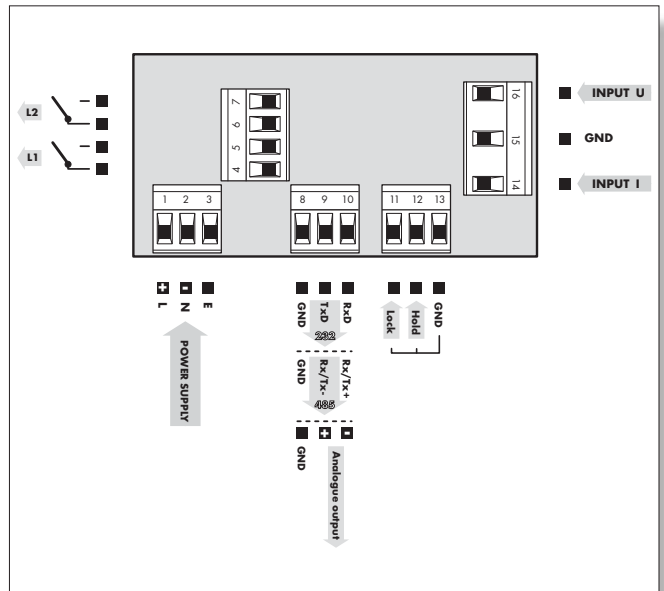
### MECHANIC PROPERTIES

Material: Noryl GFN2 SE1, incombustible UL 94 V-I  
 Dimensions: 96 x 48 x 120 mm  
 Panel cut: 90,5 x 45 mm

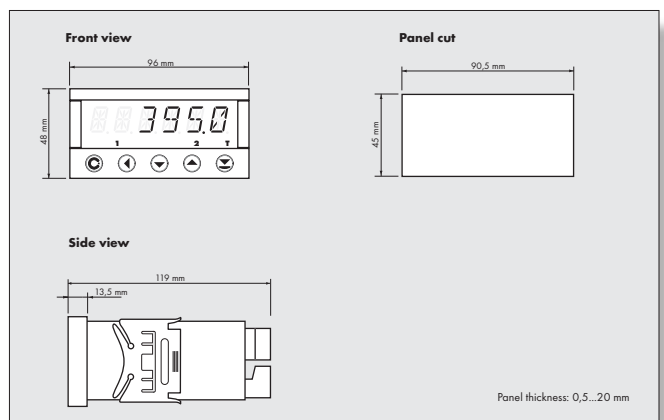
### OPERATING CONDITIONS

Connection: connector terminal board, conductor section up to 2,5 mm<sup>2</sup>  
 Stabilization period: within 15 minutes after switch-on  
 Working temperature: 0°...60°C  
 Storage temperature: -10°...85°C  
 Covering: IP65 (front panel only)  
 Construction: safety class I  
 Electrical safety: EN 61010-1, A2  
 Overvoltage category: for pollution degree II  
 III. - instrument power supply (300 V)  
 II. - input, output (300 V)  
 EMC: EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 55022, A1, A2

## Connection



## Dimensions



## Order code

