**Universal measuring device UMG 96 RM-PN / 90-277V AC / 90-250V DC**

6-channel mains analyser UMG 96RM-PN with Profinet certification for panel mounting Front dimensions: 96x96, for 4 current transformer inputs and residual current measurement (RCM) with continuous scanning of the voltage and current measurement inputs

for measurement in IT and TN networks,, UL certified.

Measurement functions:

- Automatic adaptation to mains frequencies

from 45 Hz ... 65 Hz

- Measuring intervals of 10 (50 Hz) or 12 (60 Hz) periods (200 ms), sampling frequency: 21.33 (25.6) kHz

- Continuous sampling and calculation of the following measured values:

- Voltage L-N (L1..L3), voltage L-L

- Measurement of the positive-, negative- and zero-system

- Frequency (L1)

- rotating field

- Current, L1..L3 and N (calculated from L1..L3)

- Power of the fundamental oscillation (active, reactive and apparent power, cosphi), distortion reactive power

- Sums L1..L3 of the above-mentioned power quantities

- 7 Energy meter

for active energy (supply), active energy (delivery), active energy (without backstop),

reactive energy (ind), reactive energy (kap) reactive energy (without backstop), apparent energy

each for L1, L2, L3 and Total.

- 8 tariffs

- 1..40 Harmonics of current and voltage

- Distortion factor (THD) of current and voltage

- Operating hours counter

The unit is equipped with:

- Large LCD display (67mm x 57mm) with simultaneous display of 3 measured values and

backlighting

- Standard measured value displays

- Bimetallic function for current and power readings

- Automatic or manual measured value changeover with programmable changeover time 0 - 250 sec.

- HTTP interface (homepage with REST interface)

Additional functions:

- 2 digital outputs

- 3 digital inputs/outputs configurable

- 2 analogue inputs, optionally as

temperature or residual current measurement input

- 2 comparator groups with 3 comparators each

(operator >=<)

- Monitoring of the residual current transformer inputs

Dimensions: W96 x H96 x D49mm

Interfaces:

-2x RJ45 Ethernet (CC type B / Switch Class C IRT)

-Ethernet protocols: Profinet 2.2, TCP/IP, ModBus TCP

-Profinet profiles: PROFIenergy V1.1, Entity Class 2

-RS485, protocol: Modbus RTU (9.6 - 115.2kbps)

Measuring range: L-N 0 ... 300V AC, L-L 0 ... 520V AC

Supply voltage: 90-277V/AC (45..65Hz); 90-250V/DC

Overvoltage category supply: 300V CAT III

Mains frequency: 45 - 65 Hz, power consumption: max. 7 VA

Current inputs:

L1-L4: rated current: ..1/5A, power consumption: 0.2VA, response current: 5mA

Measuring accuracy: current +-0.2%, u. voltage: +-0.2% rdg +0.02%rng

Active energy: class 0.5S at 5A and class 1 at 1A, reactive energy: class 1 at 5A

Working temperature: -10° to +55°C

Delivery includes:

Mounting accessories, documentation, parameterisation, & evaluation software in basic version, tuning of the design to the practical application as well as the measured variables incl. their recording intervals, compatible current transformer set min. cl. 0.5 all-phase, measuring transformer disconnect terminals with screw connection 0.2 - 10 mm², bridges as well as DIN rail clamp for DIN rail mounting according to DIN VDE 0100 - 557.5.3.1, compatible residual current transformers, configuration and parameterisation of the unit (e.g. mains form, transformer ratios, addressing of the communication interfaces), delivery, installation as well as connection.

Primary current at measuring point: '.........'. A

Make: Janitza electronics GmbH

Type: UMG 96 RM-PN

Item no. 5222090