

UMG604 POWER QUALITY ANALYSER

Item No.: 422.128; 422.129



DESCRIPTION OF FUNCTIONS

The UMG604 is a fully-fledged power quality analyser incorporating high-quality measuring components. It can be used to evaluate a wide variety of network parameters and transmit them via communication interfaces.

- 422.128 UMG 604 230 V power quality analyser
- 422.129 UMG 604 24 V power quality analyser

TECHNICAL DATA

Nominal voltage:	
Three-phase 4-wire systems	277/480V AC
Three-phase 3-wire systems	480V AC
Oversvoltage category:	300V CATIII
Quadrants:	4
Comprehensive measurement:	Yes
Scan rate 8 channels:	20kHz (per channel)
Weight:	350g
Dimensions:	107.5mm x 90mm x 82mm (W x H x D)
Installation:	35 mm DIN top-hat rail (pursuant to IEC EN60999-1/ DIN EN 50022)
Working temperature range:	-10° ... 55 °C
Connectable lines (U/I):	
One-wire, multiple-wire, fine-wire	0.08 - 2.5mm ²
Pin terminals, wire end ferrules	15mm ²
Protection class:	IP20 (pursuant to EN60529)

PERIPHERY

Digital inputs:	2 (status, logic or impulse input)
Digital outputs:	2 (switching logic output or impulse output)
Temperature measurement input:	1 (PT100, PT1000, KTY83, KTY84)
Password protection:	Yes (multiple levels)
Peak load management:	Yes (optional 64 channels)
Software:	Yes (GridVis)

MEASURING RANGE

Voltage L-N, AC (without voltage converter):	50...300V AC (voltage converter freely adjustable)
Voltage L-L, AC (without voltage converter):	87 ... 520V AC (voltage converter freely adjustable)
Current (converter: x/1 and x/5 A):	0.001 ... 7.5A
Fundamental component frequency:	45 ... 65Hz
Grids:	IT, TN, TT
Measurement in single-/multiple-phase grids:	1ph, 2ph, 3ph, 4ph and up to 4 times 1ph

MEASUREMENT VALUES

Voltage:	Precision $\pm 0.2\%$ (L1, L2, L3, L4, L1-L2, L2-L3, L1-L3)
Current:	Precision $\pm 0.2\%$ (L1, L2, L3, L4, sum L1-L3, sum L1-L4)
K factor:	Yes (L1, L2, L3, L4)
Alternating current components:	Yes (zero, with and counter system)
Effective, apparent, reactive power:	Precision $\pm 0.4\%$ (L1, L2, L3, L4, sum L1-L3, sum L1-L4)
Cos-phi / power factor:	Yes (L1, L2, L3, L4, sum L1-L3, sum L1-L4)
Phase angle:	Yes (L1, L2, L3, L4)
Active energy (kWh):	Class 0.5S (.../5A), class 1 (.../1A) (L1, L2, L3, L4, sum L1-L3, sum L1-L4)
Reactive energy (kvarh):	Class 2 (L1, L2, L3, L4, sum L1-L3, sum L1-L4)
Apparent energy (kVAh):	Yes (L1, L2, L3, L4, sum L1-L3, sum L1-L4)
Current/voltage ripple form:	Yes (L1, L2, L3, L4)
Fundamental component frequency:	Precision $\pm 0.1\%$
Temperature measurement:	Precision $\pm 1.5\%$
Average values:	Yes
Minimum and maximum values:	Yes

FEATURES

Memory size	128 MB
Timer:	+/- 1 min per month
Integrated logic:	Programming language Jasic®
Operating hours meter:	Yes
Week timer:	Yes

VOLTAGE QUALITY

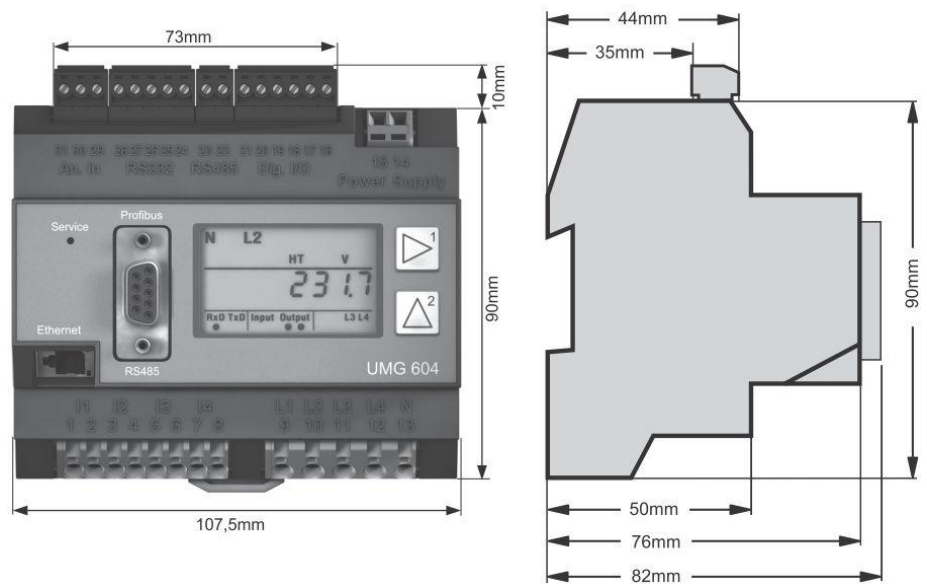
Harmonic, 1.- 40. Harmonic:	Precision $\pm 0.5\%$ (current, voltage, apparent/active power (\pm) L1, L2, L3, L4)
Distortion factor THD- U in %:	Yes (L1, L2, L3, L4)
Distortion factor THD- I in %:	Yes (L1, L2, L3, L4)
Asymmetry:	Yes
With/counter/zero system:	Yes
Transients:	Yes (50 μ s)
Start procedures:	Yes (10ms)
Fault writer function:	Yes
Short-term interruptions:	Yes

COMMUNICATION

Interface:	RS 485
Protocol:	Modbus RTU
Default baud rate:	115200
Selectable baud rate:	9600, 19200, 38400, 57600, 115200, 921600
Data format:	8N1
Default address:	1
Selectable address:	1 ... 255

Interface:	Ethernet 10/100 Base-TX
Protocol:	Modbus TCP

SCALE DRAWING



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