

QNA-P

Portable power quality analyzer



Description

Portable electric power quality analyzer that measures and records the data in compliance with the class A **IEC-61000-4-30 Standard**. Specially designed for outdoor measurements or in situations that require a highly accurate and very robust unit.

The **QNA-P** enclosure has an IP 67 degree of protection, which guarantees its robustness to strong impacts. The **QNA-P** analyzer has been tailor-made with clips and it has a wide range of flexible (LV measurements) and rigid clips (LV and MV Measurements). The internal switches can be adapted to any type of network (3/4 wires), with the use of its rigid (**CP** type) and flexible (**C-FLEX** type) clips.

Application

- The **QNA-P** portable analyzer is highly versatile and can combine rigid and flexible nucleus clips. Its robustness makes it ideal for the intake of measurements in places subject to severe weather conditions.
- The unit has been specially designed for the execution of audits and revisions, since it has been certified as Class A, in compliance with the **IEC-61000-4-30 Standard**, so that the measurements taken can be used for any type of verification; a pattern element is used during the intake process.
- The internal GSM type can also be used to download the information remotely and draft a report with the data, even before removing the analyzer, which avoids the need of travelling to the installations.

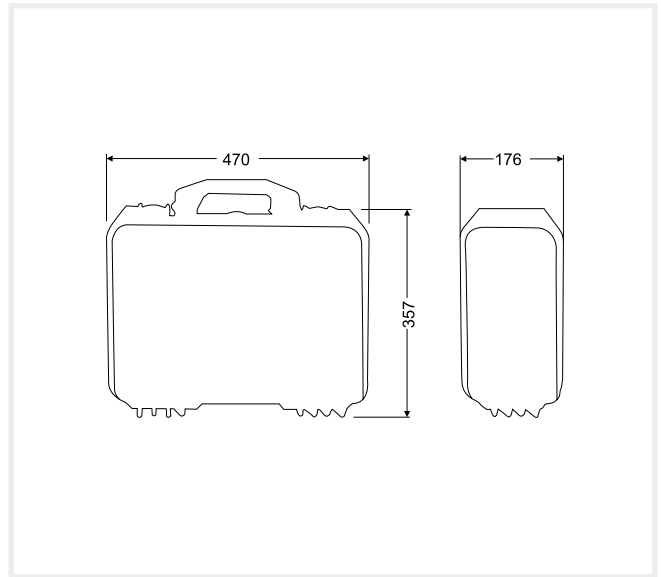
Characteristics

Power circuit	
Power supply range	100 - 240 Vac
Consumption	16 V·A / 8 W
Frequency	50 - 60 Hz
Auxiliary power circuit	
Battery	Ni MH
Autonomy	Configurable, up to 9999 s of continuous operation
Voltage measurement circuit	
Nominal voltage	3 x 500 / 866 Vac (for 4-wire connections) 3 x 500 Vac (for 3-wire connections)
Other voltages	Through the measurement transformers
Frequency	42.5 ... 69 Hz
Sampling frequency	14.130 kHz
Consumption of the voltage per phase circuit	0.3 V·A
Current measurement circuit	
Measurement margin	Depending on the clip
Maximum current	1.2 I_n
Maximum sampling frequency	14.130 kHz
Energy meter, maximum value	1 999 999 kW·h (rotates)
Accuracy	
Voltage	0.1 % U_n (IEC-61000-4-30 class A)
Current	0.1 % I_n (IEC-61000-4-30 class A)
Energy	Class 0.2S in accordance with EN-62053-22
Unbalance	± 0.15 % (IEC-61000-4-30 class A)
Flicker	5 % (IEC-61000-4-15 , IEC-61000-4-30 class A)
Harmonics	IEC-61000-4-7 class I, IEC-61000-4-30 class A
Communications	RS-232 / RS-485, GPRS / GSM / RS-232
Data memory	
Size	4 MB
Setup	Rotary (FIFO)
Ambient conditions	
Usage temperature	-20 °C ... +65 °C
Build features	
Enclosure	Sealed enclosure
Differential	IP 67
Dimensions	470 x 357 x 176 mm
Weight	6.7 kg
Safety	EN-61010-1 category III 600 V

QNA-P

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Dimensions



Standards

EN 60664, EN 61036, VDE 110, UL 94

IEC-61000-4-30 class A	Quality
IEC-61000-4-7 class I	Harmonics
IEC-61000-4-15	Flicker

Electromagnetic emission		Electromagnetic immunity	
EN 61000-3-2	Harmonics	EN 50082-2	Industrial immunity
EN 61000-3-3	Voltage fluctuations	EN 61000-4-2	Electrostatic discharge
EN 55022 class B	Driven	ENV 50140	EM Radiated field of RF
EN 55022 class A	Radiated	EN 61000-4-4	Quick temporary bursts
EN 50081-2	Industrial emission	ENV 50141	RF in common mode
-	-	EN 61000-4-5	Shockwave
-	-	EN 61000-4-8	50 Hz Magnetic field
-	-	EN 61000-4-11	Power supply interruptions

References

Analyzer	Clips	Type	Code
QNA-412 RS232/RS485	3 x C-FLEX 10k/1k/100 A - 55 mm	Kit 1 QNA-P RS	Q20711
QNA-412 GPRS/RS232	3 x C-FLEX 10k/1k/100 A - 55 mm	Kit 1 QNA-P GPRS	Q20731
QNA-412 RS232/RS485	3 x C-FLEX 10k/1k/100 A - 55 mm, kit 3 CP-5 A and 1 x CPR-500	Kit 2 QNA-P RS	Q20712
QNA-412 GPRS/RS232	3 x C-FLEX 10k/1k/100 A - 55 mm, kit 3 CP-5 A and 1 x CPR-500	Kit 2 QNA-P GPRS	Q20732

Distribution of memory

Type of file	Default storage capacity	Data stored
*.STD	74 days	Voltage, flicker, harmonics and unbalance
*.EVQ	minimum of 342 events	Measurement events (overvoltages, voltage gaps and interruptions)
*.EVE	4655 records	Events related to the analyzer (change of setup, change of hour, etc.)
*.WAT	32 days	Active, reactive L and reactive C
*.H24	32 days	Data for the statistical study of the evolution of harmonics every 24 hours
*.STP	16 weeks	Weekly statistical voltage values, THD (U), flicker, frequency and unbalance