



K-QNA500-A 8IOR, Advanced power quality analyzers

Code: Q20933. DESCATALOGADO

> Protocol: Modbus/TCP | ZMODEM | FTP | webserver (HTTP)

> Memory: 4 GB

> Memory: Yes

> Events / Waveform (1 = yes): Yes

> Demand control: Yes

> Web server: Yes

> Energy accuracy: 0,2S

> Communications: RS-232 | RS-485 | Ethernet

> N° relays: 8 > Digital inputs: 8 > Harmonics: 50

> Class: A

> Mounting: Pannel | DIN rail | Wall-mounted

### Description

QNA 500 is a modular power quality analyzer designed to measure and record the main electrical parameters and transient disturbances. The measurement is taken in true root mean square (TRMS), with 5 AC voltage inputs, 4 AC current inputs (via ... /5 A current transformers) and a leakage current input.

### **Application**

QNA0500 is designed to supervise the electric installation and problems relating to electric power quality, in order to control production processes and manage incidents. It integrates easily with SCADA applications and interacts with commercially available PLCs, and so can be part of more global data acquisition systems and report to users the information they require at any time. Its modularity and the addition of M-108 modules enable the user to also control energy consumption, states of switches or loads, send alarms, and even connect/disconnect loads according to configurable conditions.

When combined with CIRCUTOR PowerVision Plus software, the user can configure customised reports to assess the correct running of the electric installation, and can apply standards such as the EN-50160, event tables such as CBEMA, UNIPEDE or others. By automating this information, the user can view the most important data needed for the relevant analysis with just one click .







Modular power quality analyzer

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### **Specifications**

Auxiliary battery power supply		
Battery type	Ni-MH extraíble ( base module)	
AC power supply		
Consumption	26 VA	
Frequency	5060 HZ (Alim.Aux.:módulo base)	
Nominal voltage	90300 Vc.a.(Alim.Aux.:módulo base)	
DC power supply		
Nominal voltage	100300 Vdc (Aux. power base module)	
Mechanical characteristics		
Size (mm) width x height x depth	174 x 125 x 173.3 (mm)	
Envelope	Self-extinguishing V0 plastic	
Differential current measurement	≤ 2,5 mm2	
Fastening	DIN rail 46227 (EN 50022) or Bottom Panel	
Weight (kg)	2,3	
Environmental characteristics		
Protection class	IP 41	
Relative humidity (without condensation)	595%	
Working temperature	-10+60 °C	
Standards		
Certifications	CE, UL, VDE	
Electrical safety, Maximum height (m)	2000	
Electrical safety, Installation category	CAT IV (600 V) o CAT III (1000 V) IEC 61010	
Standards	IEC 664, VDE 0110, UL 94, IEC 801, IEC 348, IEC 571-1, EN 61000-6-3, EN 61000-6-1, EN 61010-1, EN 61000-4-11, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 55011, IEC 61000-4-30 Class A or Class S	
Current measurement circuit		
Sampling frequency	512 samples / cycle	
Phase current measuring range	1120% of In (In: 5A)	
Permanent overload	120% In (In: 5A, Imax: 6A)	
Maximum pulse current	100 A	
Voltage measurement circuit		
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Frequency measuring range	42.569 Hz
Nominal voltage	0500V Ph-N / 0866V Ph-Ph
Insulation voltage	1.2/50µs (8/20µs) 6 kV
Maximum permanent measurement voltage	1500 V (Ph-Ph)
Electrical characteristics	
Insulation voltage, circuit	1.2/50µs (8/20µs) 6kV
Communication Network	
Protocol	ModBus/TCP, Cirbus, TCP/IP
Technology / Interface	Ethernet
Electrical safety	
Insulation	Double-insulated electric shock protection class II (IEC 61010-1)
Digital inputs	
Input/output insulation	5 kV
Quantity	8
Consumption (per input)	2,5 mW
Туре	Optocoupler
Minimum signal width	15 µs
Operating voltage	12-18 Vdc
Leakage current measurement (ID)	
Sampling frequency	64 samples / cycle
Measurement range	0-3 A
Maximum current	3 A
Digital relay outputs	
Nominal current	6 A
Туре	Relay
Nominal voltage	250 V~ / 30 Vdc
Maximum load VAC	6 A (250 V~ resistive)
Measurement accuracy	
Current unbalance (Kd)	±5 % (IEC61000-4-30 class A)
Voltage unbalance (Kd)	±5 % (IEC61000-4-30 class A)
Active energy measurement (kWh)	0,2 % (in accordance with IEC 62053-22)
Active power measurement (kW)	0,2 % (in accordance with IEC 62053-22)
Phase voltage measurement	0,1 % (IEC-61000-4-30 class A)
Pst Flicker	According to IEC 61000-4-15
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Current harmonics (THD)	According to IEC 61000-4-7
Voltage harmonics (THD)	According to IEC 61000-4-7
Processor	
Analoque to digital converter (ADC)	24 bits
Sampling frequency	512 samples/cycle per channel
Serial communication	
Protocol	Modbus RTU
Technology / Type	RS-232 RS-485

Communications through the BASE module (mandatory). Check the maximum number of modules that can be connected for each BASE system. The QNA500 include the Power Vision+ software Each unit is made up of a BASE module  $(power \, supply) + measuring \, module \, + inputs/outputs \, module \, (according \, to \, each \, type). \, Compatible \, with \, PowerStudio \, (version \, 4.02 \, and \, higher).$ 







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#### Dimensions Connections



