

The experience of the Qualistar

ensuring high performance



IEC 61010
**1000 V
CAT III**

IEC 61010
**600 V
CAT IV**

POWER AND ENERGY QUALITY ANALYSERS

*Measure all the necessary
voltage, current and
power parameters
for full diagnosis of an
electrical installation.*

*Capture and record all the
parameters, transients,
alarms and wave forms
simultaneously.*

Proven simplicity of use.

QUALISTAR+

- + 4 voltage inputs & 4 current inputs
- + Inrush mode
- + Unprecedented memory capacity
- + Voltage and current ratios ^(NEW)

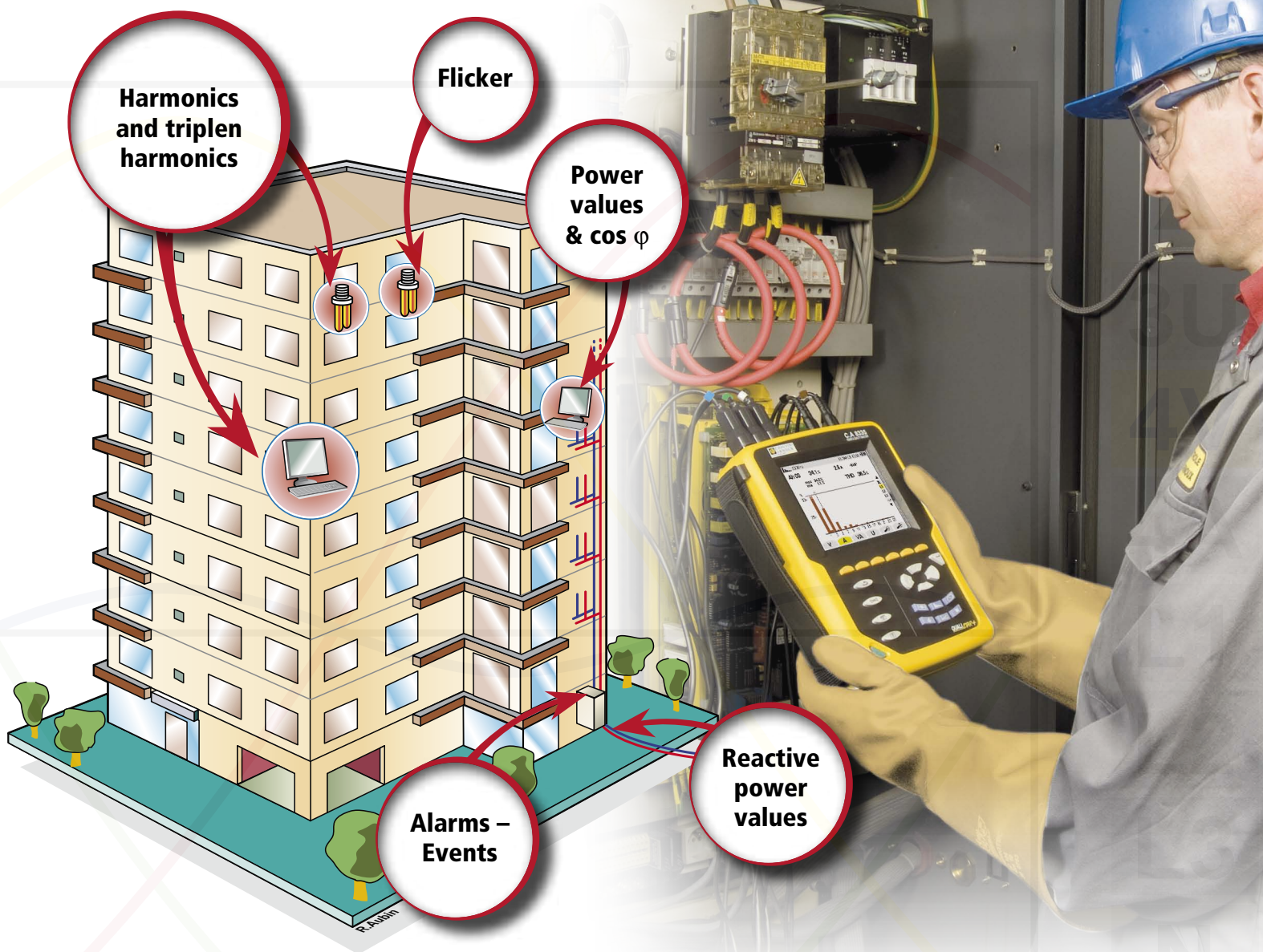
Power and energy quality analysers

Designed for inspection and maintenance teams in industrial or administrative buildings, the Qualistar can provide a snapshot of the main electrical network quality characteristics.

Easy to handle and precise, these instruments also offer a large number of calculated values and several processing functions.



FUNCTIONS

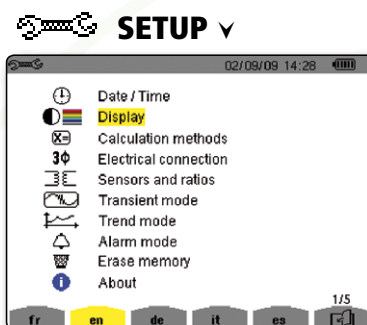


- ✓ Real-time display of wave forms (4 voltages and 4 currents)
- ✓ Half-period RMS measurements of voltages and currents
- ✓ Intuitive use
- ✓ Automatic recognition of the different types of current sensors
- ✓ Integration of all the DC components
- ✓ Measurement, calculation and display of harmonics up to the 50th order, with their phase information
- ✓ Calculation of Total Harmonic Distortion (THD)
- ✓ Capture of transients as short as one sample (1/256th of a period)
- ✓ Display of phasor diagram
- ✓ Measurement of the total VA, W and var power values, as well as the values per phase
- ✓ Measurement of total VAh, Wh and varh values, as well as the values per phase
- ✓ Calculation of the K-Factor
- ✓ Calculation of the $\cos \varphi$ displacement power factor (DPF) and the power factor (PF)
- ✓ Capture of up to 210 transients
- ✓ Flicker calculation
- ✓ Unbalance calculation (current and voltage)
- ✓ Monitoring of the electrical network with setting of alarms
- ✓ Back-up and recording of screenshots (image and data)
- ✓ Recording and export on PC
- ✓ Software for data recovery and real-time communication with a PC.

Power and energy quality analysers

SETUP

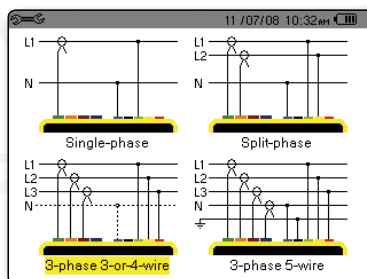
Users enter the instrument's general parameters (date and time, display contrast, etc.) directly. They then select the type of network to which the Qualistar is connected. The sensors connected are recognized automatically. Verification is possible on the corresponding screen.



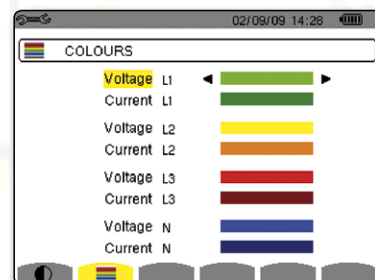
NEW FEATURE OF THE C.A 8335 menus available in 25 languages!



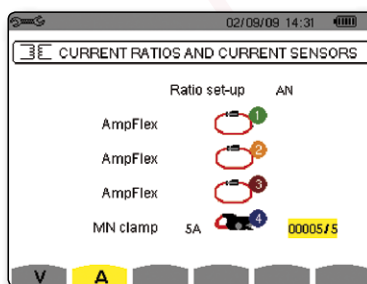
CONNECTIONS



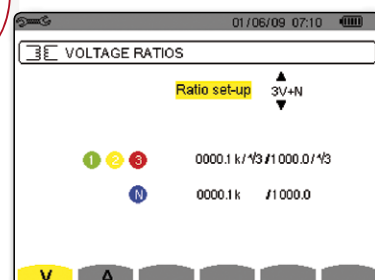
DISPLAY



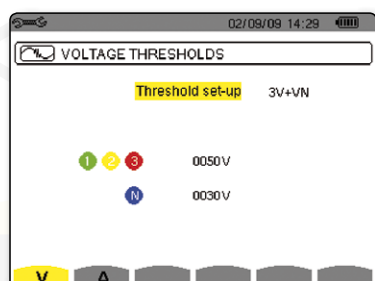
RATIOS AND SENSORS



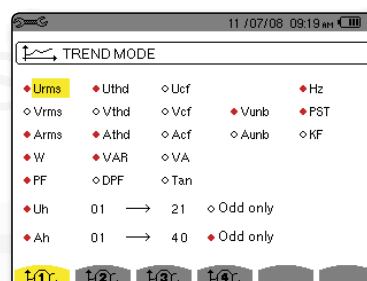
NEW FEATURE OF THE C.A 8335



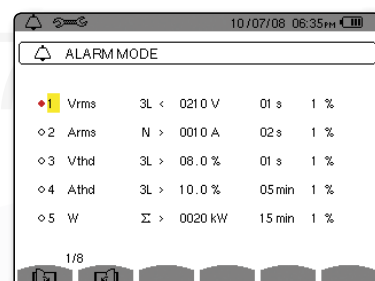
TRANSIENTS



RECORDINGS



ALARMS



INSTANTLY VIEW THE CHARACTERISTICS OF A NETWORK

OBSERVATION



GRAPH ▾

NEW FEATURE OF THE C.A 8335
View all 4 inputs simultaneously!

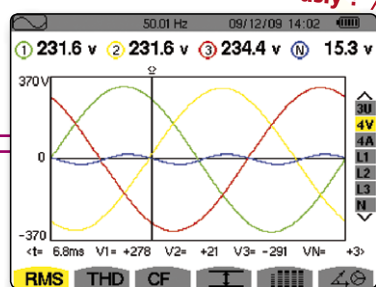
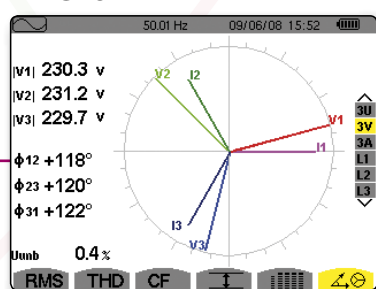


TABLE ▾

	1	2	3
MAX	402.1	404.7	404.4 v _r
RMS	400.2	402.8	402.7 v _r
MIN	397.9	401.0	400.7 v _r
PEAK+	+566.3	+569.3	+569.6 v
PEAK-	-566.0	-569.6	-569.4 v

VECTORIAL ▾



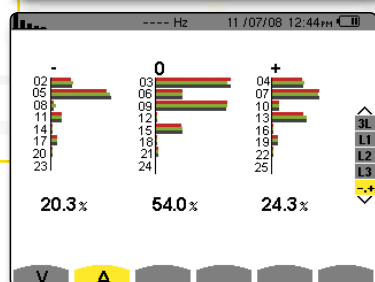
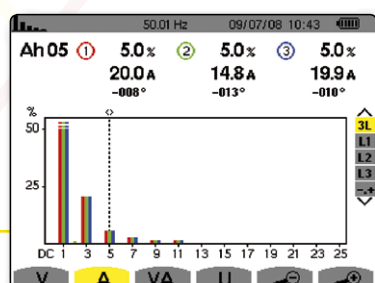
DIAGNOSIS



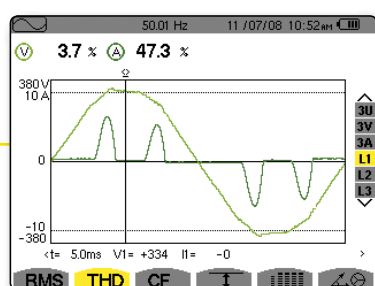
Harmonics mode

Global THD and phase by phase in U, I, V, VA in %, and RMS value, phase shift of harmonics. Only the C.A 8334 & C.A 8335 models have the function for harmonics in VA and the "expert mode". This mode can be used to analyse the influence of the harmonics on heating of the neutral or on rotating machines.

GLOBAL THD ▾ ▾



THD PHASE BY PHASE ▾

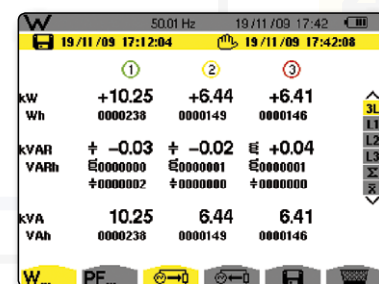


Power/Energy mode

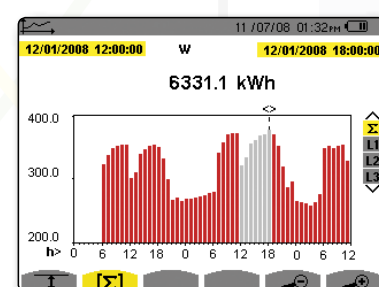
This mode displays all the values concerning power and energy. The "start" and "stop" keys can be used to activate and deactivate totalizing of the energies.

Measurements of: W, var, VA
Wh, varh, VAh
PF, DPF or cos φ
AND tan φ

POWER MEASUREMENT ▾



INTEGRATION OF POWER / ENERGY OVER A PERIOD OF TIME ▾ ▾

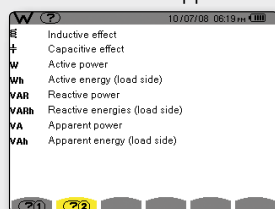


Practical advantages

Accessible on the front panel of the Qualistar®, screenshots can be produced simply by pressing a key. The Help function is available at every stage when you use the Qualistar®.

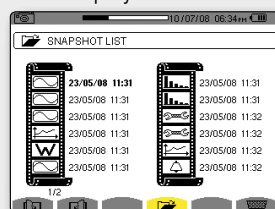
Help

If you have any hesitations, the **Help** key clearly explains the functions applicable to the screen display.



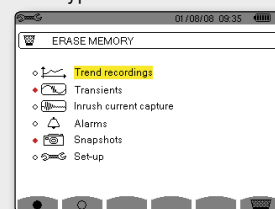
Screenshot

When this key is pressed, the instrument takes a screenshot. The screen displayed is then saved automatically with time/date-stamping.



Deletion

To avoid overloading the memory, the user can select the type of file to delete and only keep what is useful.



Power and energy quality analysers

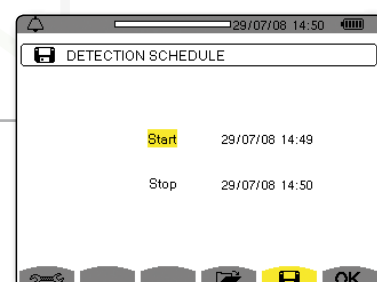
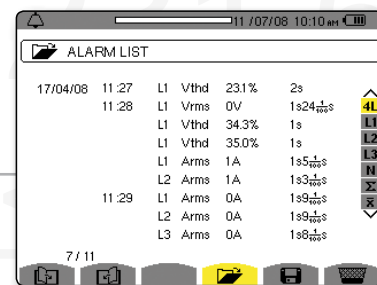
MONITORING

All the monitoring operations are applied to all the characteristics **simultaneously!**



Alarms mode

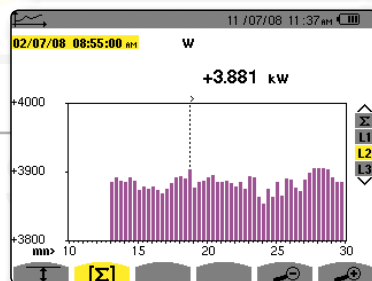
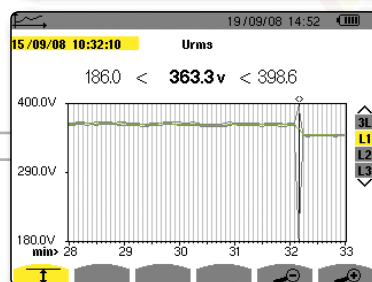
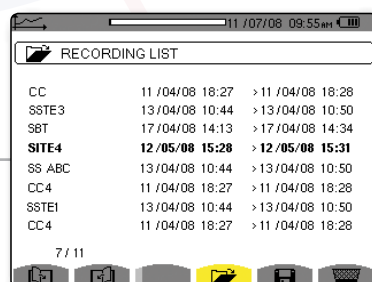
The alarms are defined when setting up the instrument. Users directly define all the thresholds to be monitored when measuring. Every time there is an alarm threshold overrun, the instrument time/date-stamps the event and records its duration, as well as its Min and Max values.



Recording mode

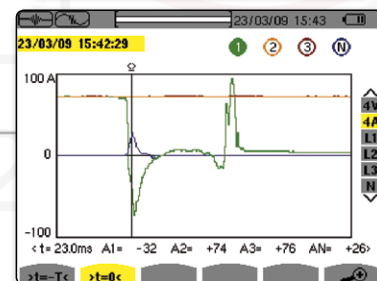
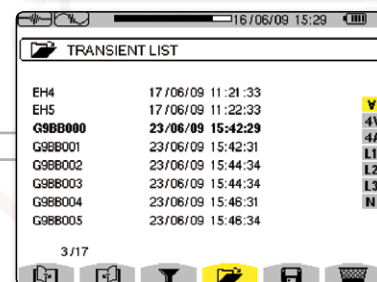
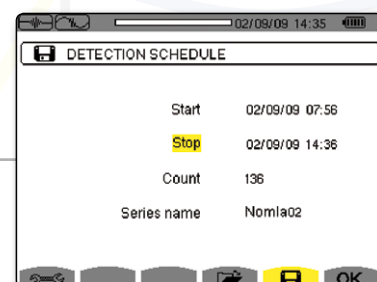
(Min / Max only on C.A 8335)

When a recording is made, all the parameters required are saved with graphic display of all the parameters selected. In addition, a bargraph at the top of the window indicates the total recording time. The recording period and storage rate are both programmable.



Transient mode

Transient mode can be used to capture events on the voltage and current, triggered according to thresholds. They are displayed over 4 periods of the event captured at a rate of 256 points/period, with the possibility of zooming in or out.

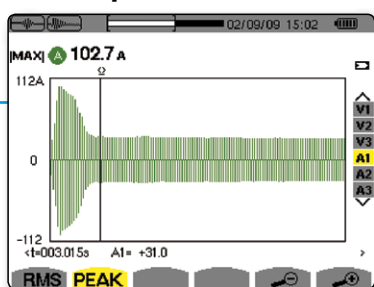


INRUSH

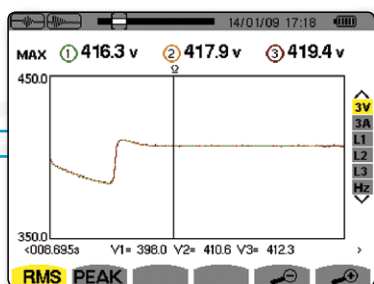
(NEW FEATURE
C.A 8335)

The Inrush current is the maximum input current drawn by an electrical device when it is powered up. This measurement helps to size the electrical installation correctly.

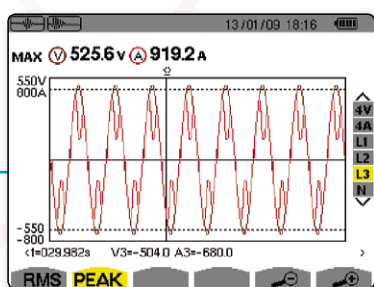
Envelope mode



RMS values



Wave form



SOFTWARE

Measurements made with the **Qualistar** can be processed with 2 software products; **Power Analyzer Transfer** for basic processing, and **DataView** for more comprehensive processing.

Power Analyzer Transfer

- Configuration of the instrument: setup, recording, alarms
- Processing of recorded data and alarms
- Transfer of screenshots and transients
- Export of the data into Excel spreadsheet
- Export of the data in graphic form in Windows™



DataView®

The easy-to-use **DataView** software automatically recognizes the instrument connected to the PC and opens the corresponding menu.

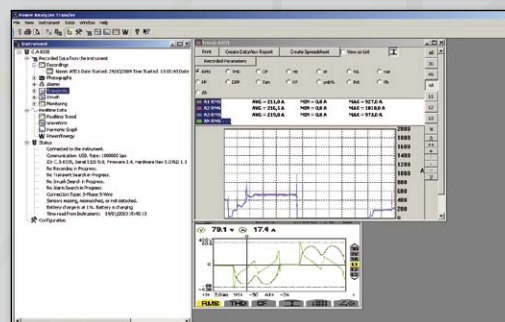
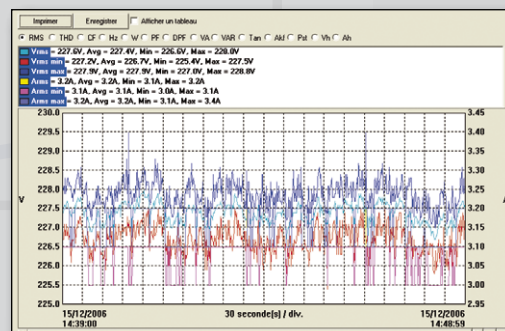
Users have direct access to:

- ✓ the data recorded in the instrument
- ✓ its configuration
- ✓ the various real-time measurements
- ✓ printing of reports
- ✓ database management

These instruments are connected to the PC via a USB link or RS232 interface. **DataView** is compatible with other Chauvin Arnoux® products.

Minimum Operating System requirements:

- ✓ Windows® 2000
- ✓ Windows® XP
- ✓ Windows® Vista
- ✓ Windows® 7



ACCESSORIES

In its standard configuration, the **Qualistar** is supplied in a carrying bag with its measurement leads and crocodile clips, its mains power supply, a PC connection cable and processing software.

Users can then choose the current clamps as required.

New with the C.A 8335! Colour-coded rings can be fitted at each end of the measurement leads, making it easier to identify your connections.



MEASUREMENTS

	C.A 8332B	C.A 8334B	Qualistar+ C.A 8335
Number of channels	3U / 4I		4U / 4I
Voltage (TRMS AC+DC)	<i>Phase-Phase</i>	6 V to 960 V	10 V to 1,000 V
	<i>Phase-Neutral</i>	6 V to 480 V	10 V to 1,000 V
	<i>Voltage ratio</i>	-	up to 500 kV
Current (TRMS AC+DC)	100 mA to 6,500 A		
<i>MN clamps</i>	MN93: 2 to 240 AAC ; MN93A: 0.005 AAC to 5 AAC / 0.1 AAC to 120 AAC		
<i>C193 clamp</i>	3 A to 1,200 AAC		
<i>AmpFLEX or MA clamps</i>	30 A to 6,500 AAC		
<i>PAC93 clamp</i>	10 A to 1,000 AAC / 10 A to 1,400 ADC		
<i>E3N clamp</i>			50 mA to 10 AAC/DC 100 mA to 100 AAC/DC
<i>Current ratio</i>			10 mA to 50 kA
Frequency	40 Hz to 69 Hz		
Power values	W, VA, var, PF, DPF, cos φ, tan φ		
Energy values	Wh, varh, VAh		
Harmonics	yes		
	<i>THD</i>	yes, orders 0 to 50, phase	
	<i>Expert mode</i>	-	yes
Transients	-	50	210
Flicker	yes		
Inrush mode	-	yes, on 4 periods	yes, > 1 minute
Unbalance	yes		
Recording	<i>Min/Max recording</i>	no	yes
	<i>of all parameters at max. sampling rate</i>	21 minutes	1 month
	<i>of a selection of parameters with acquisition every 10 min</i>	> 17 days	several years
Alarms	4,000 of 10 different types		10,000 of 40 different types
Recognition of current sensors	8		9
Peak	yes		
Vectorial representation	automatic		
Display	Colour ¼ VGA LCD screen, 320 x 240, diagonal 148 mm		
Capture of screens and curves	8	12	50
Electrical safety	IEC 61010 1,000 V CAT III / 600 V CAT IV		
Languages	6		25+
Communication interface	Optical RS232 / USB		USB type B
Power supply	9.6 V NiMH rechargeable battery or external mains charger		
Dimensions	240 x 180 x 55 mm		
Weight	2.1 kg		1.9 kg

STATE AT DELIVERY

C.A 8332B and C.A 8334B: delivered with 1 carrying bag No. 22, an optical RS232 lead, a mains power cable, 4 x 3 m voltage leads with 4 mm banana connectors, 4 crocodile clips, 1 safety plug, 1 operating manual, PC software for data recovery. Plus the set of current sensors chosen.

C.A 8335: delivered with 1 carrying bag No. 22, 1 USB lead, 1 power supply charger, 1 mains power cable, 5 x 3 m voltage leads with Ø 4 mm banana connectors, 5 crocodile clips, 1 x 12-colour identification set for leads and inputs, 1 protective film for screen, 1 safety plug, 1 multilingual operating manual, PC software for data recovery.

REFERENCES FOR ORDERING

C.A 8335 alone..... P01160577
C.A 8332B-F MN93A clamp..... P01160522
C.A 8334B-F MN93A clamp..... P01160552
C.A 8332B-F AmpFLEX™ 450 mm..... P01160523
C.A 8334B-F AmpFLEX™ 450 mm..... P01160553
C.A 8332B-INT MN93A clamp..... P01160525
C.A 8334B-INT MN93A clamp..... P01160555
C.A 8332B-INT AmpFLEX™ 450 mm..... P01160526
C.A 8334B-INT AmpFLEX™ 450 mm..... P01160556
Other models: please contact us.

ACCESSORIES

MN93 clamp P01120425B
MN93A clamp P01120434B
C193 clamp P01120323B
PAC93 clamp P01120079B
AMP450 clamp..... P01120526B
AMP800 clamp..... P01120531B
Mini-AmpFLEX™ MA193, 200 mm.. P01120580
E3N clamp*..... P01120043A
E3N adapter*..... P01120081
E3N mains power pack*..... P01120047

Battery pack P01296024
Qualistar screen film P01102059
Set of id. rings/inserts*..... P01102060
Carrying bag no.21..... P01298055
Carrying bag no.22..... P01298056
RS232 optical lead** P01295190A
USB-A USB-B lead* P01295291
5 A box P01101959
C.A8335 mains power pack* .. P01102057
Software DataView..... P01102095

* C.A8335 only, ** C.A 8334B/C.A 8332B



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560

Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.