

The experience of the Qualistar

ensuring high performance

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.

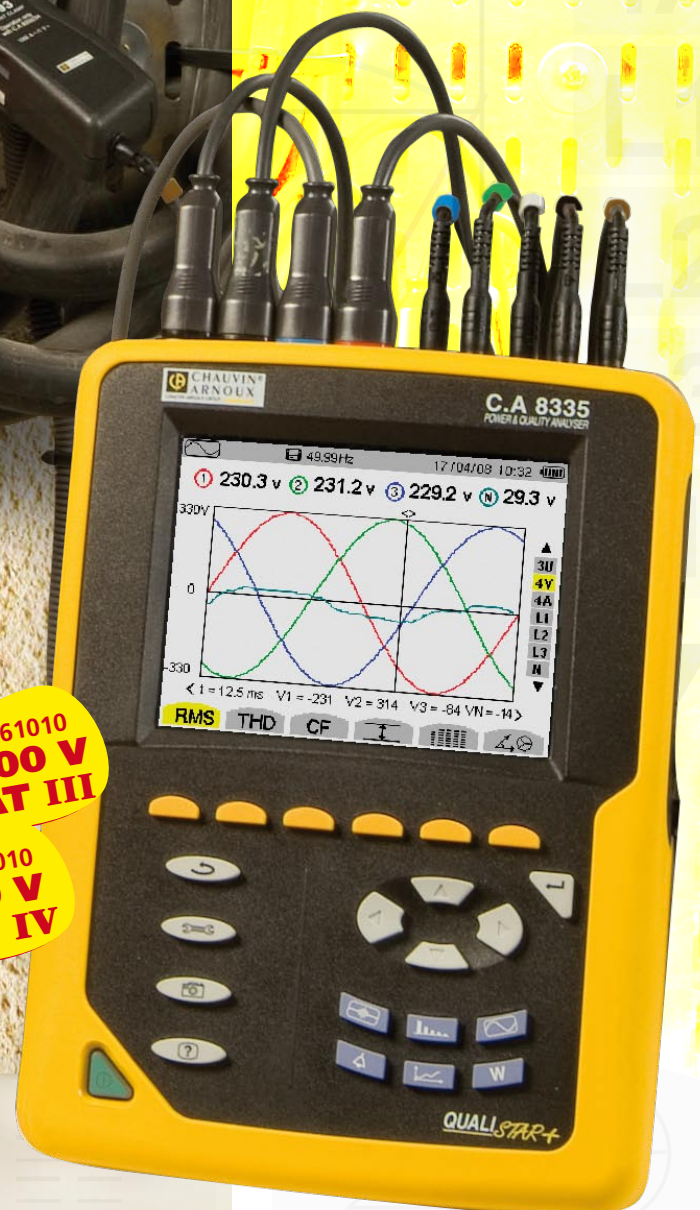
Proven simplicity of use.

QUALISTAR+

- + 4 voltage inputs & 4 current inputs
- + Inrush mode
- + Memory capacity

IEC 61010
**1000 V
CAT III**

IEC 61010
**600 V
CAT IV**



Power and energy quality analysers

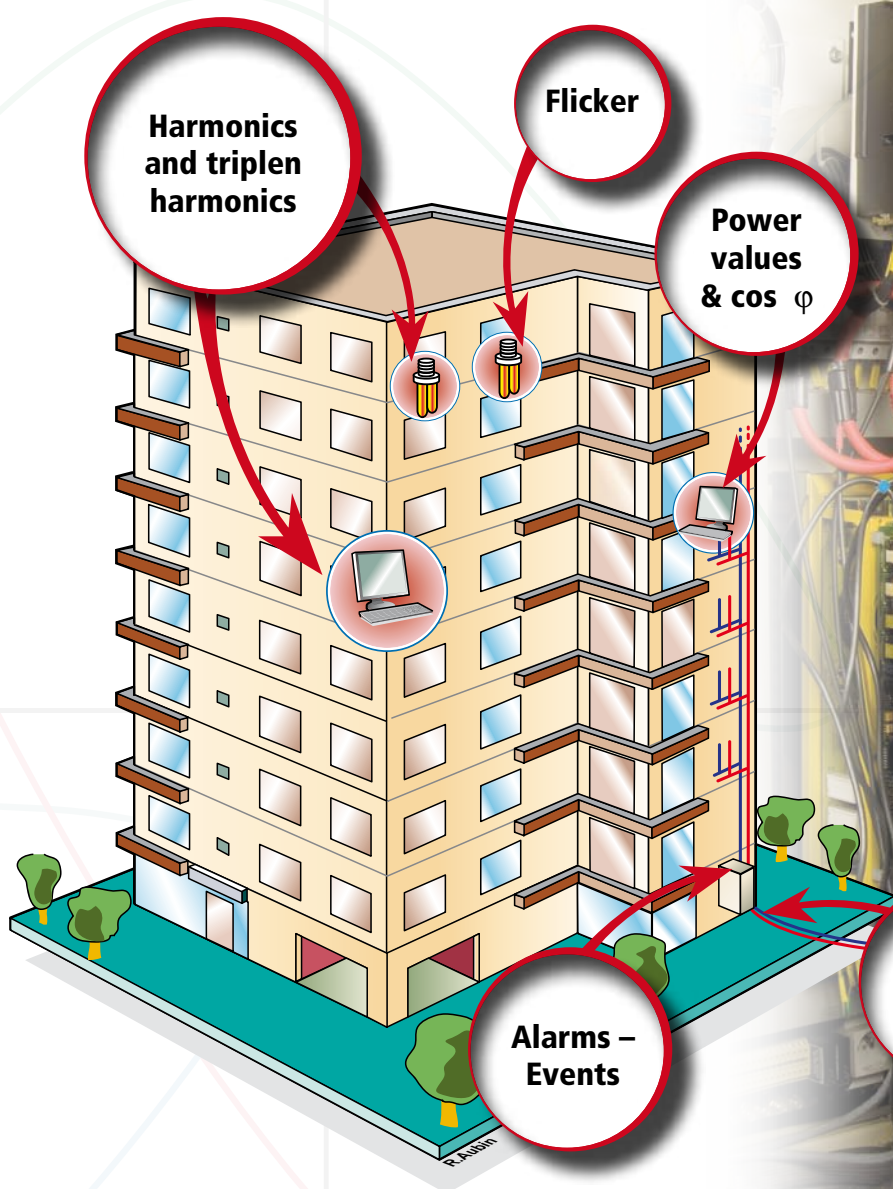
C.A 8332B - C.A 8334B - C.A 8335

Designed for inspection and maintenance teams in industrial or administrative buildings, the Qualistars 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



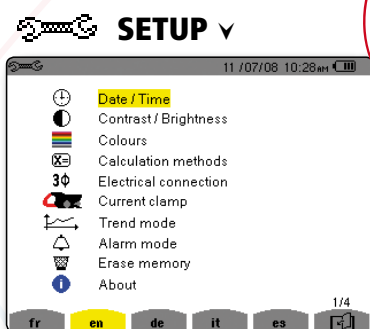
- ✓ Real-time display of wave forms (4 voltages and 4 currents)
- ✓ Half-period RMS measurements of voltages and currents
- ✓ Intuitive use
- ✓ Automatic recognition of the different types of current sensors
- ✓ Integration of all the DC components
- ✓ Measurement, calculation and display of harmonics 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 300 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.

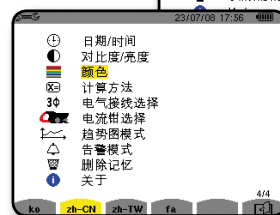
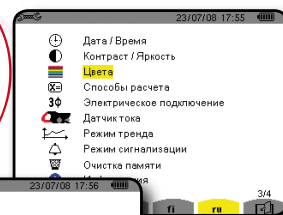
Power and energy quality analysers C.A 8332B - C.A 8334B - C.A 8335

SETUP

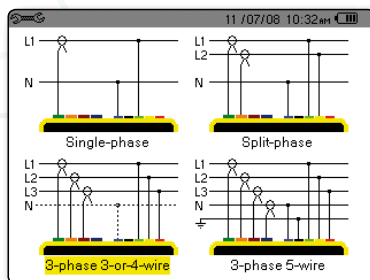
Users enter the instrument's general parameters (date and time, display contrast, etc.) directly. They then select the type of network to which the Qualistar is connected. The sensors connected are recognized automatically. Verification is possible on the corresponding screen.



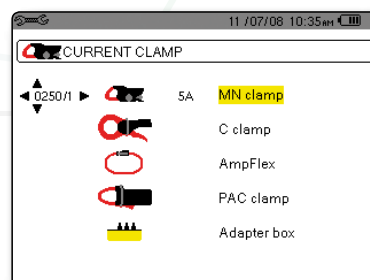
**NEW FEATURE
OF THE C.A 8335
menus available
in 21 languages!**



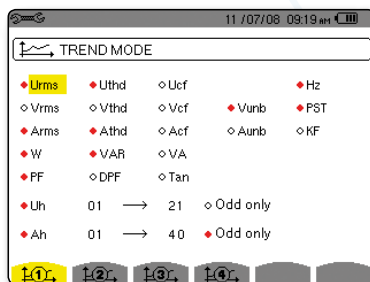
CONNECTIONS



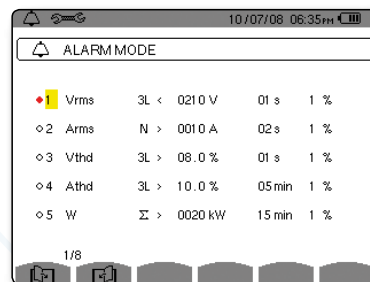
SENSORS CONNECTED



RECORDINGS



ALARMS

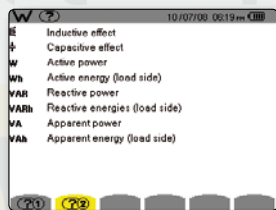


Practical advantages

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

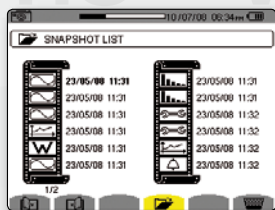
Help

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



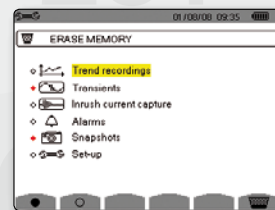
Screenshot

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.



INSTANTLY VIEW THE CHARACTERISTICS OF A NETWORK

OBSERVATION



GRAPH ▾

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

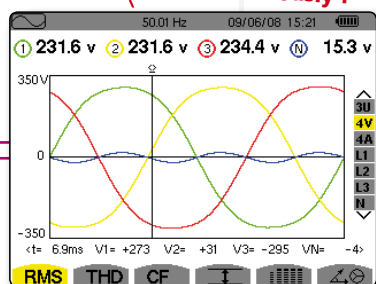
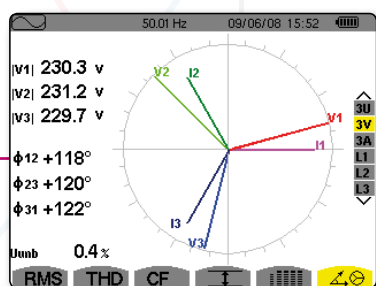


TABLE ▾

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

VECTORIAL ▾



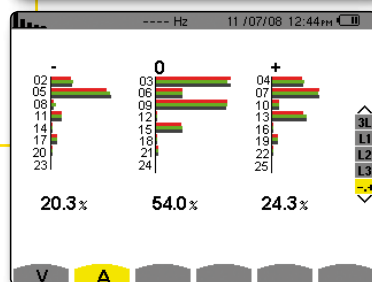
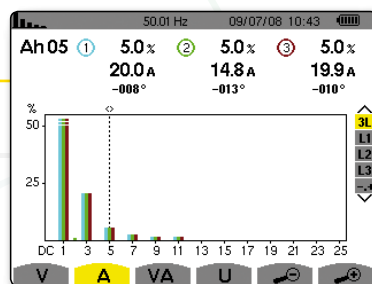
DIAGNOSIS



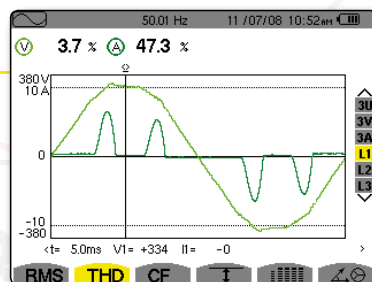
Harmonics mode

Global THD and phase by phase in U, I, V, VA in %, and RMS value, phase shift of harmonics. Only the C.A 8334 model has 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

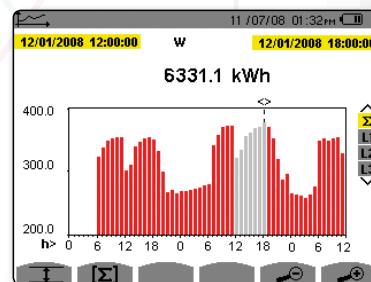
This mode displays all the values concerning power and energy. The "start" and "stop" keys can be used to activate and deactivate totalizing of the energies.

Measurements of: W, Var, VA
Wh, Warh, VAh
PF, DPF or $\cos \phi$ and $\tan \phi$

POWER MEASUREMENT ▾

	①	②	③	
kW	+10.25	+6.44	+6.41	
Wh	0000238	0000149	0000146	
kVAR	± -0.03	± -0.02	± +0.04	
VARh	± 0000000	± 0000001	± 0000001	
kVA	10.25	6.44	6.41	
VAh	0000238	0000149	0000146	

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



Power and energy quality analysers

C.A 8332B - C.A 8334B - C.A 8335

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 parameterize 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.



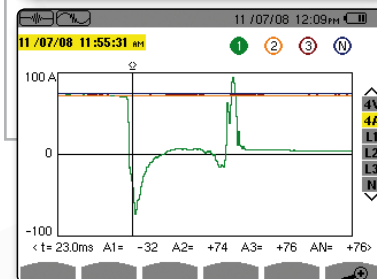
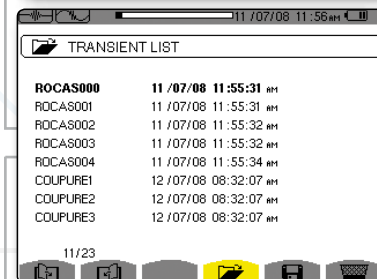
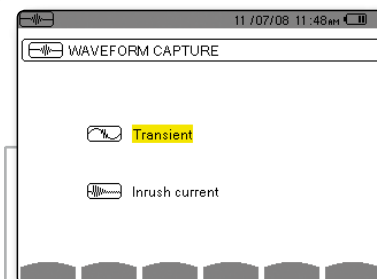
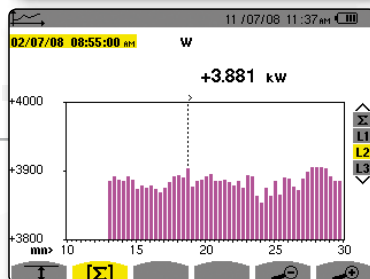
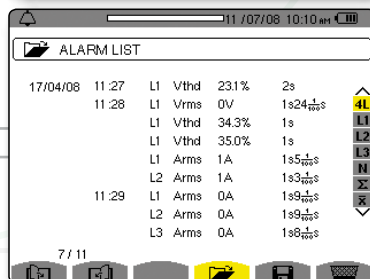
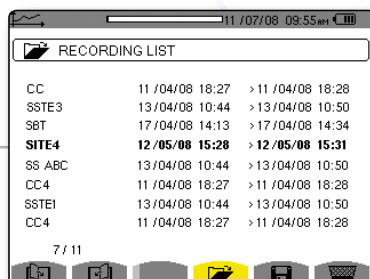
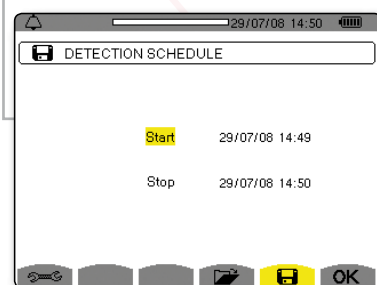
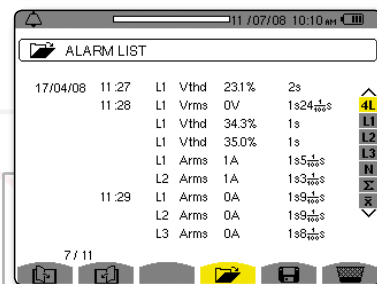
Recording mode (Min / Max only on C.A 8335)

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.

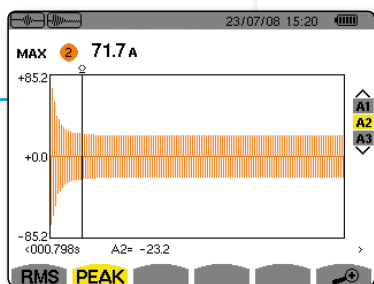


INRUSH

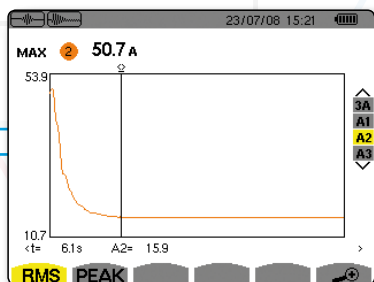
(NEW FEATURE
C.A 8335)

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.

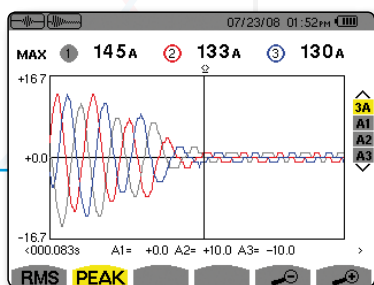
Envelope mode



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
- Analysis of the data according to the EN50160 standard
- 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.

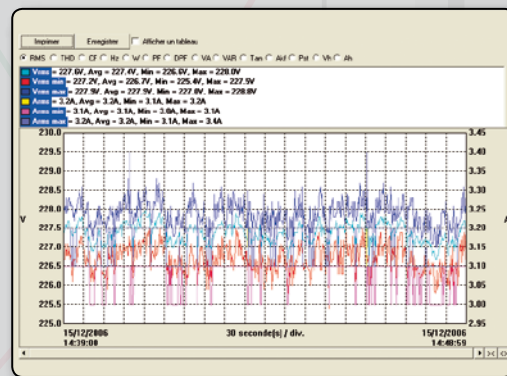
Users have direct access to:

- ✓ 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. It is compatible with other Chauvin Arnoux® products.

Minimum Operating System requirements:

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



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.



Technical specifications

C.A 8332B - C.A 8334B - C.A 8335

MEASUREMENTS

MEASUREMENTS		C.A 8332B	C.A 8334B	Qualistar+ C.A 8335
Number of channels		3U / 4I		4U / 4I
Voltage (RMS AC+DC)	Phase-phase	6 V to 960 V		10 V to 1,000 V
	Phase-neutral	6 V to 480 V		10 V to 1,000 V
Current (RMS AC+DC)		100 mA to 6,500 A		
	MN clamp	MN93: 2 to 240 A; MN93A: 0.005 A to 5 A / 0.1 A to 120 A		
	C clamp	3 A to 1,200 A		
	AmpFLEX or MA clamps	30 A to 6,500 A		
	PAC clamp	10 A to 1,000 AAC / 10 A to 1,400 ADC		
Frequency		40 Hz to 69 Hz		
Power values		W, VA, var, PF, DPF, cos φ, tan φ		
Energy values		Wh, varh, VAh		
Harmonics		yes		
	THD	Yes, orders 0 to 50, phase		
	Expert mode	-	yes	
Transients		-	50	300
Flicker		yes		
Inrush mode		-	Yes, on 4 periods	Yes, > 1 minute
Unbalance		yes		
Recording (of all parameters at max. sampling rate)		21 minutes	42 minutes	1 month
Min/Max recording		no		yes
Alarms		4,000 of 10 different types		10,000 of 40 different types
Recognition of current sensors		8		8+
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		20+
Communication interface		Optical RS232 / USB		USB type B
Power supply		9.6 V NiMH rechargeable battery		External mains charger 600 V CAT IV
Dimensions		240 x 180 x 55 mm		
Weight		2.1 kg		1.9 kg

STATE AT DELIVERY

C.A 8332B delivered with 1 carrying bag No. 22, an optical RS232 lead, a mains power cable, 4x 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 8334B delivered with 1 carrying bag No. 22, an optical RS232 lead, a mains power cable, 4x 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	P01160652
C.A 8332B-F AmpFLEX™ 450mm	P01160523
C.A 8334B-F AmpFLEX™ 450mm	P01160653
C.A 8332B-INT MN93A clamp	P01160525
C.A 8334B-INT MN93A clamp	P01160555
C.A 8332B-INT AmpFLEX™ 450mm	P01160526
C.A 8334B-INT AmpFLEX™ 450mm	P01160656

ACCESSORIES

MN clamp	P01120425B
MN93A clamp	P01120534B
C clamp	P01120323B
PAC clamp	P01120079B
AMP450 clamp	P01120526B
AMP800 clamp	P01120531B
5 A box	P01101959
DataView	P01102058

C.A8335 mains power pack	P01102057
USB-A/USB-B lead	P01295291
Qualistar screen film	P01102059
Set of id. rings/inserts	P01102060
Carrying bag no. 21	P01298055
Carrying bag no. 22	P01298056
RS232 optical lead	P01295190A

Other models: please contact us



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