



G4500 Portable Power Quality Analyzer Optional Accessories



DC CURRENT CLAMP

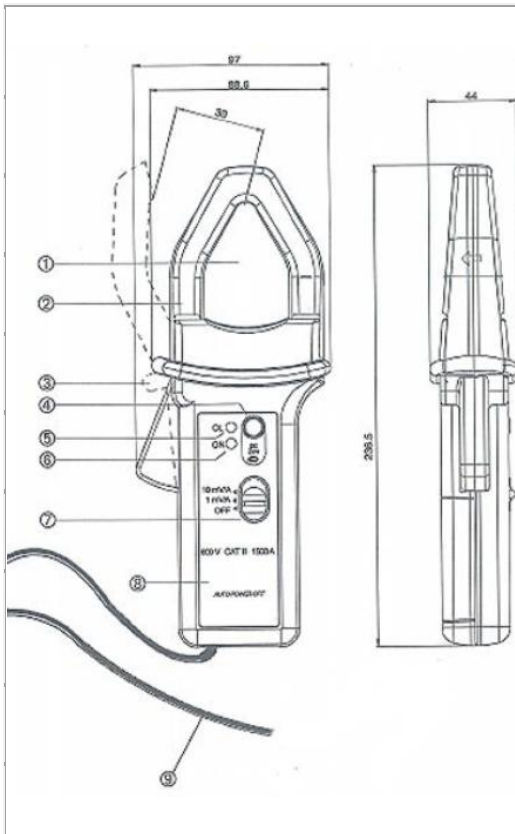
Elspec P/N	SOA-0270-1400
Current Measurement	1,500A DC / 1,000A AC
Measurement Range	1m V/A; 10m V/A
Operating Temperature	-20°C to + 60°C
Cable Length	1.4m



Elspec's current clamp (SOA-0270-1400) measures DC or AC currents, without opening the circuits they are flowing in. The current clamp is used as an accessory for the G4500 BLACKBOX Portable. This clamp measures DC current up to 1500 A and AC current up to 1000A. It outputs the form and amplitude of the current measured as a voltage image of the primary current.

This clamp measures DC & AC currents. It outputs the form and amplitude of the current measured as a voltage image of the primary current.

It is equipped with a zero adjust push button, an auto-off feature in order to economize the battery power supply, with 2 light indicators, one for faults (over-range/incorrect zero reset), the other for power supply.



PHYSICAL SPECIFICATIONS

1	Passages of the Conductor
2	Jaws
3	Protective Non-Slip Guard
4	Automatic Zero DC Button
5	Red Fault Light (over range/incorrect zero adjustment)
6	Green Light Indicating correct power supply
7	3 position sliding switch (off / selection of 1m V/A or 10m V/A ranges)
8	Hand held parts
9	Fitted Leads 1.4 M

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CLAMP OPERATION

SWITCHING ON

Set the sliding switch (7) to the appropriate position (range with 1m V/A or 10m V/A sensitivity).

The green light (6) will indicate a correct operation & that the battery is in good condition. Should the clamp be in operation continuously for 10 min., without its controls being handled, the power supply will be cut off automatically (see "auto off" below).

The battery needs to be replaced when the green indicator does not come on when the clamp is switched on, or goes off during normal operation / prior to the above mentioned 10 min. period.

DC ZERO ADJUSTMENT

1. Ensure that the jaws of the clamp are correctly closed and that they do not enclose any conductor.
2. Connect the clamp to your measurement instrument.
3. Press the auto zero button (4).

The red light (5) comes on for approximately three seconds to indicate that the instrument is on zero calibration. If zero cannot be obtained this indicator light remain lit to indicate the fault.

MEASUREMENT

1. After having switched on the clamp, connect it to the measurement instrument on the appropriate range.
2. Follow the auto zero procedure (see above),
3. Enclose the conductor to be measure (1) in the jaws of the clamp.

The value is displayed on the measurement instrument.

4. Depending on the sensitivity selected on the clamp and the range of your measurement instrument, apply the conversion ratio to get the value of the current.



Warning: On DC current measurements, ensure that the arrow located on the external edge of the jaws corresponds to the direction of the current flowing in the conductor (source ==>receiver).

Specifications

GENERAL

Range [A]	Input / Output Ratio [mV/A]	Measurement Extent		
		AC RMS	A Peak Max	A DC
100	10	0.2 - 100	0.2 - 150	0.4 - 150
1000	1	0.5 - 1000	0.5 - 1400	0.5 - 1400

NON CALIBRATED SPECIFICATIONS

100A RANGE (10 mV/A)

Range [A]	Accuracy [%]
0.5 - 20	$\leq 15 + 5mV$
20 - 100	≤ 1.5
100 - 150 (on DC only)	≤ 2.5

Range [A]	Phase /Shift [deg.]
10 - 20	≤ 3
20 - 100	≤ 2

1000A RANGE (10 mV/A)

Range [A]	Accuracy [%]
0.5 - 100	$\leq 15 + 1mV$
100 - 800	≤ 2.5
800 - 1000 AC 800 - 1400 DC 800 - 1400 Peak	≤ 4

Range [A]	Phase /Shift [deg.]
10 - 200	≤ 20
200 - 1000	≤ 1.50