

SPECIFICATIONS

Electrical supply range

230 V a.c. 230 V a.c. $\pm 10\%$

Supply measurement

Voltage: $\pm 2\% \pm 1\text{ V}$

Frequency: $\pm 1\% \pm 0.1\text{ Hz}$

Bond test (PAT350)

Open circuit voltage: 9 V a.c. $\pm 10\% \pm 0.1\text{ V}$ (Supply: 230 V 50 Hz)

10 A Bond test current:

10 A rms $\pm 20\% \pm 0.5\text{ A}$ into 0.1 Ω

25 A Bond test current:

25 A rms $\pm 5\% \pm 0.5\text{ A}$ into 0.1 Ω

Earth bond resistance accuracy:

$\pm 5\% \pm 3$ digits (0 to 0.49 Ω)

$\pm 5\% \pm 5$ digits 0.5 to .99 Ω)

Earth bond resistance resolution:

10 m Ω (0 to 1.99 Ω)

Display range: 0 to 1.99 Ω

Bond test nulling: Up to 1.00 Ω

Adjustable test duration:

User selectable from 1 sec to 20 sec

Continuity test

Note:

The continuity test is a DC test performed automatically in both positive and negative directions. The average of the two results is shown.

Continuity test voltage:

4.0 V d.c. -0% +10% (open circuit)

Continuity test current:

200 mA -0% +10% $\pm 5\text{ mA}$ (into 2 Ω load)

Continuity resistance accuracy:

$\pm 5\% \pm 3$ digits (0 to 0.49 Ω)

$\pm 5\% \pm 5$ digits 0.5 to .99 Ω)

Continuity resistance resolution:

10 m Ω (1 to 19.99 Ω)

Display range: 0 to 19.99 Ω

Continuity test nulling:

up to 9.99 Ω

Test duration: User selectable from 1 sec to 20 sec

Insulation test

Insulation test voltage:

250 V d.c. -0%/+25% open circuit

500 V d.c. -0%/+25% open circuit

(500 V d.c. across 0.5 M Ω)

Insulation resistance accuracy (230 V):

$\pm 2\% \pm 5$ digits (0 to 19.99 M Ω)

$\pm 5\% \pm 10$ digits (20 to 99.99 M Ω)

Insulation resistance resolution:

0.01 M Ω (0.10 to 99.99 M Ω)

Display range: 0 to 99.99 M Ω

Test duration: User selectable from 1 sec to 1 minute

Substitute leakage test

Test voltage: 40 V a.c. $\pm 10\%$

Test frequency: Nominal mains 50/60 Hz

Leakage current accuracy: $\pm 5\% \pm 5$ digits

Leakage current resolution: 0.01 mA

Display range: 0 to 19.99 mA

Test duration: User selectable from 1 sec to 1 minute

Reading corrected to 230 V + 10%

Differential leakage current

Test voltage: Nominal mains 230 V a.c.

Test frequency: Nominal mains 50/60 Hz

Differential leakage current accuracy:

$\pm 5\% \pm 5$ digits

Differential leakage current resolution:

0.01 mA

Display range: 0 to 19.99 mA

Reading corrected to 230 V + 10%

Touch current test

Test voltage: Nominal mains 230 V a.c.

Test frequency: Nominal mains 50/60 Hz

Touch current accuracy: $\pm 5\% \pm 5$ digits

Touch current resolution: 0.01 mA

Display range: 0 to 10 mA

Test duration: User selectable from 1 sec to 5 sec

Reading corrected to 230 V + 10%

Operational test

Test voltage: Nominal mains 230 V a.c.

Accuracy: $\pm 5\% \pm 10$ digits (0 to 99 VA)

$\pm 5\% \pm 50$ digits (100 VA - 999 VA)

$\pm 5\% \pm 100$ digits (1000 VA - 3700 VA)

Resolution: 1 VA (0 to 3700 VA)

Display range: 0 to 3.99 KVA

Reading corrected to 230 V

Results show load VA

Extension lead test

Test includes insulation and bond tests.

Polarity test voltage: 12 V

Polarity: Lead OK

Live neutral S/C

Live neutral reversed

Live/neutral O/C

Flash test (PAT350)

Flash test voltage: 1500 V a.c. nominal for Class I

3000 V a.c. nominal for Class II

Flash test current: < 3.5 mA short circuit @ 253 V primary supply voltage

Flash test breakdown current accuracy: $\pm 5\% \pm 5$ digits

Flash test breakdown current resolution: 0.01 mA

Display range: 0 to 3.0 mA

Test duration: User controlled

Portable RCD test

RCD test voltage: Nominal mains 230 V

RCD test frequency: 50 Hz

Test current accuracy: -8% to -2% ($\frac{1}{2} \times I$)

+2% to +8% (1 x I, 5 x I)

Trip time accuracy: $\pm 1\% \pm 5$ digits

Trip time resolution: 0.1 ms

Display range: 0 to 1999 ms ($\frac{1}{2} \times I$)

0 to 300 ms (1 x I)

0 to 40 ms (5 x I)

Fuse test

Test voltage: 3.3 V

Warning: Audible beep if fuse is OK

Safety

PAT300 series meet the requirements of IEC 61010-1: 2001

Test leads meet the requirements of IEC 61010-031: 2002

Creepage and clearances for 300 volts to Earth Category II

Operating temperature	10 to +50 °C
Storage Temperature:	-20 to +60 °C
Humidity	90% RH @ -10 to +30 °C
	75% RH @ +30 to +50 °C

Weight

PAT310 (instrument only)	4.5 kg
PAT350 (instrument only)	5.0 kg

Dimensions

Instrument only:	175 mm (H) x 320 mm (D) x 250 mm (W)
With case	190 mm (H) x 400 mm (D) x 290 mm (W)

ORDERING INFORMATION

Product	Order Code	Product	Order Code
PAT310-EU	1000-742	Optional accessories	
PAT350-EU	1000-953	Plug adaptor IEC C6 - C13 (3 way 5 A PSU)	2000-551
Included accessories		415 V adaptor lead (4-pin) to SC (CEE7/7) (16 A)	1000-768
Printed quick start guide		415 V adaptor lead (5 pin) to SC (CEE7/7) (16 A)	1000-771
Full user guide on CD		Roll of 1000 FAIL test labels	1001-227
Calibration certificate		Roll of 1000 PASS test labels	1000-971
Continuity/earth bond lead + probe (black)	2000-870	PAT accessory pouch	2001-044
Extension lead adaptor (ELA) 230 V SC (CEE7/7)	2000-82	PAT test certificate book	1001-299
Flash test lead 3.0 KV 3.5 mA (red) (PAT350 only)	5310-401		
Carry case with lead/document pouch	2000-962		

UK
Archcliffe Road Dover
CT17 9EN England
T +44 (0) 1304 502101
F +44 (0) 1304 207342
UKsales@megger.com

UNITED STATES
4271 Bronze Way
Dallas TX 75237-1019 USA
T 800 723 2861 (USA only)
T +1 214 333 3201
F +1 214 331 7399
USsales@megger.com

OTHER TECHNICAL SALES OFFICES
Valley Forge USA, College Station USA, Sydney
AUSTRALIA, Täby SWEDEN, Ontario CANADA,
Trappes FRANCE, Oberursel GERMANY, Aargau
SWITZERLAND, Kingdom of BAHRAIN, Mumbai
INDIA, Johannesburg SOUTH AFRICA, Chonburi
THAILAND

CERTIFICATION ISO
Registered to ISO 9001:2000 Cert. no. Q 09290
Registered to ISO 14001:1996 Cert. no. EMS 61597
PAT310_PAT350_DS_EU_V01
www.megger.com
Megger is a registered trademark