LT300

High current loop testers



- High current loop tester
- Single and 3 phase testing
- 16 Hz to 400 Hz operation
- CATIV 300 V applications
- Two wire lead set or mains plug leads
- Tough armoured case
- Built-in cover

DESCRIPTION

The LT300 offers high current loop testing over a wide range of frequencies and supply voltages with simple, fast, two wire operation.

It has a large clear display that aids visibility in poor conditions.

Two models are available:

LT300-EN-00 - with red/green leads LT300-EN-BS - with BS1363 mains plug lead

The high current loop test provides fast accurate and stable results with a resolution to 0.01 Ω on the 20 Ω range.

Frequency range

Supply frequency is indicated upon connection to the supply. This will automatically set to the measured supply frequency either 16 Hz, 50/60 Hz or 400 Hz. Testing will commence automatically.

Loop Impedance measurement:

Two loop impedance ranges are provided. 20 Ω - Resolution to 0.01 Ω 200 Ω - Resolution to 0.1 Ω

Supply voltage:

Operational supply range extends from 50 V to 550 V (400 V @ 16 Hz), with a warning for voltages over 330 V highlighting accidental phase to phase connections on a nominal 230 V system.

Single Phase CATIV 300 V phase to earth, as well as 550 V phase to phase applications (400 V @ 16 Hz)

GENERAL

The instrument is housed in a rubber armoured case with a built-in cover to protect the display when not in use.

The IP54 weatherproof rating provides excellent protection in adverse conditions.

The instrument is supplied with either a two wire (red/green) lead set, or a mains plug test lead for access to wall sockets, a certificate of test and a hard carry case.

Megger.

SPECIFICATION

Voltage measurement range

Voltage range: 0 V to 550 V (400 V @ 16 Hz)

Accuracy: $\pm 5\% \pm 2 \text{ V}$

Loop test operating frequencies

16 Hz 15 Hz to 18 Hz, 33 Hz, 29 Hz to 337 Hz 50/60 Hz 40 Hz to 70 Hz, 125 Hz, 100 Hz to 142 Hz

400 Hz 260 Hz to 498 Hz

Test currents

	20 Ω Range	200 Ω Range
550 V	27 A	2.7 A
230 V	12 A	1.2 A
115 V	6 A	0.6 A
50 V	3 A	0.3 A

Loop test accuracy

Loop resistance:

0 to 19.99 Ω (20 Ω range) $\pm 5\% \pm 0.03 \Omega$ 0 to 199.9 Ω (200 Ω range) $\pm 5\% \pm 0.5 \Omega$

Environmental

Operating temperature: $-10^{\circ}\text{C to } +60^{\circ}\text{C}$

Storage temperature: -25°C to +70°C

Humidity: 90%RH @+40°C

Maximum altitude: 2,000 m

Dust and water: IP54

Battery: 8 x AA (LR6) alkaline or NiMH rechargeable cells.

Safety

Meets the requirements of IEC61010-1 300 V CATIV phase to earth or 550 V Phase to Phase ($400 \text{ V} \ @ 16 \text{ Hz}$).

EN61557

Complies with the following parts of EN61557, Electrical safety in low voltage systems up to 1000~V~a.c. and 1500~V~d.c. Equipment for testing, measuring or monitoring of protective measures:

Part1 - General Requirements

Part3 - Loop resistance

EMC

In accordance with IEC61326-1

Weight: 980gms (2.16lb)

Dimensions: 203 x 148 x 78mm (8 x 5.8 x 3 in)

ORDERING INFORMATION		
Item (Qty)	Order Code	
High current loop tester with red/green lead set	LT300-EN-00	
High current loop tester with BS1363 mains plug lead	LT300-EN-BS	
High current loop tester complete with fused leads	LT300-EN-FS	
Included Accessories		
Red/green 2 wire test lead set		
(LT300-EN-00)	6220-784	
Mains plug test lead (BS1363) (LT300-EN-BS)	6220-810	
Hard carry case	5410-409	
Fused leads ONLY WITH LT300-EN-FS	6220-827	
Optional Accessories		
Red/green 2 wire Lead set	6220-784	
Mains plug test lead (BS1363)	6220-810	