

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

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

LT300-EN-FS - with fused red/green leads

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 1

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.

SPECIFICATION

Voltage measurement range

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

Accuracy: $\pm 5\%$ ± 2 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 ½ Range	200 ½ 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 ½ (20 ½ range) $\pm 5\%$ ± 0.03 ½

0 to 199.9 ½ (200 ½ range) $\pm 5\%$ ± 0.5 ½

Environmental

Operating temperature: -10°C to +60°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 V @ 16 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

Description	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)	1001-976
Mains plug test lead (BS1363) (LT300-EN-BS)	6220-810
Hard carry case	5410-409
Fused leads ONLY WITH LT300-EN-FS	1001-977
Optional Accessories	
Mains plug test lead (BS1363) (LT300-EN-BS)	6220-810
Red/green 2 wire test lead set (LT300-EN-00)	1001-976
Spare fuse for leads	25950-013