

# 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

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### 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  $\Omega$  on the 20  $\Omega$  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  $\Omega$  - Resolution to 0.01  $\Omega$
- 200  $\Omega$  - Resolution to 0.1  $\Omega$

#### Supply voltage:

Operational supply range extends from 50 V to 550 V (400 V @ 16 Hz), with a warning for voltages over 330 V high-lighting 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.

**SPECIFICATION**

**Voltage measurement range**

**Voltage range:** 0 V to 550 V (400 V @ 16 Hz)  
**Accuracy:** ± 5% ± 2 V

**Loop test operating frequencies**

16 Hz 15 Hz to 18 Hz  
 50/60 Hz 40 Hz to 70 Hz  
 400 Hz 260 Hz to 490 Hz

**Test currents**

|       | <b>20 Ω Range</b> | <b>200 Ω Range</b> |
|-------|-------------------|--------------------|
| 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) ± 5% ± 0.03 Ω  
 0 to 199.9 Ω (200 Ω range) ± 5% ± 0.5 Ω

**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 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 including amendment No.1

**Weight:** 980gms (2.16lb)

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

**ORDERING INFORMATION**

| <b>Item (Qty)</b>                                    | <b>Order Code</b> |
|------------------------------------------------------|-------------------|
| High current loop tester with red/green lead set     | LT300-EN-00       |
| High current loop tester with BS1363 mains plug lead | LT300-EN-BS       |
| <b>Included Accessories</b>                          |                   |
| Red/green 2 wire test lead set (LT300-EN-00)         | 6220-784          |
| Mains plug test lead (BS1363) (LT300-EN-BS)          | 6220-810          |