

# 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  $\Omega$  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 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:**  $\pm 5\%$   $\pm 2$  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)  $\pm 5\%$   $\pm 0.03$  ½

0 to 199.9 ½ (200 ½ range)  $\pm 5\%$   $\pm 0.5$  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 |
| <b>Included Accessories</b>                          |             |
| 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    |
| <b>Optional Accessories</b>                          |             |
| 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   |

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