

To avoid electrical shock, disconnect the meter from any circuit, remove the test leads from the input jacks and turn OFF the meter before opening the case. Do not operate with open case. Install only the same type of fuse or equivalent

Calibration

Periodic calibration at intervals of one year is recommended to maintain meter accuracy. Accuracy is specified for a period of one year after calibration. If self-diagnostic message "C_Er" is being displayed while powering on, some meter ranges might be largely out of specifications. To avoid mis-leading measurements, stop using the meter and send it for re-calibration. Refer to the LIMITED WARRANTY section for obtaining warranty or repairing service.

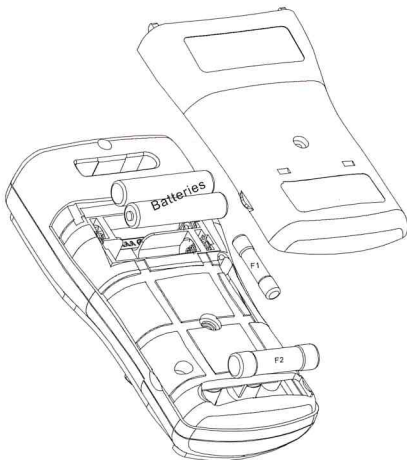
Cleaning and Storage

Periodically wipe the case with a damp cloth and mild detergent; do not use abrasives or solvents. If the meter is not to be used for periods of longer than 60 days, remove the battery and store it separately

Trouble Shooting

If the instrument fails to operate, check battery, fuses, leads, etc., and replace as necessary. Double check operating procedure as described in this user's manual

If the instrument voltage-resistance input terminal has subjected to high voltage transient (caused by lightning or switching surge to the system) by accident or abnormal conditions of operation, the series fusible resistors will be blown off (become high impedance) like fuses to protect the user and the instrument. Most measuring functions through this terminal will then be open circuit. The series fusible resistors and the spark gaps should then be replaced by qualified technician. Refer to the LIMITED WARRANTY section for obtaining warranty or repairing service.



Battery and Fuse replacement

Battery use: 1.5V AAA Size battery x 2

Fuses use:

Fuse (F1) for μ A current input:
0.4A/1000V ac & dc, IR 30kA, F fuse; Dimension: 6 x 32 mm

Fuse (F2) for A current input:
11A/1000V ac & dc, IR 20kA, F fuse; Dimension: 10 x 38mm

Battery and Fuse replacement:

Loosen the screw from the access cover of the case bottom. Lift the access cover. Replace the batteries or fuse. Re-fasten the screw.

GENERAL SPECIFICATION

Display: 3-5/6 digits 6,000 counts

Update Rate: 5 per second nominal

24 Segments Bar graph: 40 per second max

Operating Temperature: 0°C to 40°C

Relative Humidity: Maximum relative humidity 80% for temperature up to 31°C decreasing linearly to 50% relative humidity at 40°C

Altitude: Operating below 2000m

Storage Temperature: -20°C ~ 60°C, < 80% R.H. (with battery removed)

Temperature Coefficient: Nominal 0.15 x (specified accuracy)/°C @ (0°C ~ 18°C or 28°C ~ 40°C), or otherwise specified

Sensing:

Models 251s, 252s & 255s: Average sensing

Model 257s: True RMS sensing

Pollution Degree: 2

Safety: Double insulation per IEC/UL/EN61010-1 Ed. 3.0, IEC/EN61010-2-030 Ed. 1.0, IEC/EN61010-2-033 Ed. 1.0, IEC/UL/EN61010-031 Ed. 1.1 and CAN/CSA-C22.2 No. 61010-1-12 Ed. 3.0 to Category II 1000V, CAT III 600V and CAT IV 300V AC & DC

Transient Protection: 6.5kV (1.2/50 μ s surge)

Terminals (to COM) Measurement Category:

V / mA μ A / A: Category II 1000V, CAT III 600V and CAT IV 300V AC & DC.

E.M.C.: Meets EN61326-1:2006 (EN55022, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11)

In an RF field of 3V/m:

Capacitance function is not specified

Other function ranges:

Total Accuracy = Specified Accuracy + 100 digits

Performance above 3V/m is not specified

Overload Protection:

μ A & mA: 0.4A/1000V DC/AC rms, IR 30kA @ 1000V DC/AC rms

A: 11A/1000V DC/AC rms, IR 20kA @ 1000V DC/AC rms

V & AutoCheck™: 1100V DC/AC rms

mV, Ohm & others: 1000V DC/AC rms

Low Battery: Below approx. 2.3V

Power Supply: 1.5V AAA Size battery X 2

Power Consumption (typical): 3.5mA

APO Consumption (typical): 10 μ A

APO Timing: Idle for 34 minutes

Dimension: 161*80*50mm L*W*H (With Holster)

Weight: Approx. 340 gm (With Holster)

Special Features: AutoCheck™ V & Ω (models 255s & 257s only); Auto-ranging MAX/MIN Record (models 255s & 257s only); Crest mode (Peak Hold, models 255s & 257s only); Backlighted LCD (models 255s & 257s only); Auto-ranging Relative Zero mode; Display Hold; EF-Detection (NCV); Interface capabilities with PC computer; Input warning detection