

# Insulation & Multifunction Tester(OLED Display)



CE

## 1155 TMF-M

### FEATURES

- High Contrast OLED display.
- Designed for viewing in the dark, for mining industry.
- Auto-range microprocessor-controlled.
- Automatic voltmeter AC/DC at Start/Reset.
- Battery test at switch ON/Reset.
- Safety voltmeter before each test.
- Auto-discharge on all tests and all ranges.
- Leads auto-null key.
- Test auto-stop.
- Smart hold and stop on voltmeter AC/DC.
- Ener-Save™.
- Continuity short circuit >220mA.
- Continuity open circuit voltage of 5Vdc.
- Nominal voltage @ 1mA on all insulation ranges.
- Polarization index (PI).
- Dielectric Absorption Ratio (DAR).
- BS 16<sup>th</sup> edition.

### Series model

1151 IN-M

1152 MF-M

1154 TMF-M



## 1151 IN-M



## 1152 MF-M



## 1154 TMF-M

### SPECIAL FUNCTIONS

#### • DAR (Dielectric Absorption Ratio)

The dielectric Absorption Ratio is the ratio of the Insulation Resistance measured at 1 min divided per the Insulation Resistance measured at 30 seconds.

30 seconds after starting a test (with EnerSave™ disabled), the tester will beep, indicating the operator that the resistance value measured at 30 second now has been saved internally. 1 Minute after starting a test (with EnerSave™ disabled), the tester will beep again, indicating the user that the DAR result is now computed, and change the display format to now display the DAR result.

#### • PI (Polarization Index)

The Polarization Index or PI is the ratio of the Insulation Resistance measured at 10 minutes divided per the Insulation Resistance measured at 1 minute.

10 minutes after starting a test (with EnerSave™ disabled), the tester will beep again, indicating the user that the PI result is now computed, and change the display format to now display the PI result.

The tester will Auto-Stop at 10 minutes

#### • Voltmeter

When testing insulation resistance while there is a presence of voltage (whether ACV or DCV) on the measured object, conventional insulation testers are highly susceptible to damage. With this new line of insulation testers, it has the ability to switch to voltage detection mode without damaging the once it detects the presence of voltage. It will also display the voltage finding on the OLED display screen. With this new and unique function, it will allow the user to safely rule out the possibility of any presence of voltage on the measured object prior to measuring its insulation.

#### • MOV and Gas Arrester Testing

Most equipments and electrical installations are protected by MOVs and Gas arresters.

They can test these devices to establish if the devices are still operating correctly or not.

Energy conservation is featured on all these new Advanced Products.



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SPECIFICATIONS		1151 IN-M	1152 MF-M	1154 TMF-M	1155 TMF-M
Multi-Function Testers		Electrical Installations	Electrical Installations Maintenance Analysis	Electrical Installations Telecoms Maintenance	Electrical Installations Telecoms Maintenance Analysis
<b>Insulation</b>					
<b>Test voltage</b>	<b>Insulation Resistance</b>				
1000V	0.2MΩ ~ 8GΩ	•	•	•	•
500V	0.2MΩ ~ 4GΩ	•	•	•	•
250V	0.2MΩ ~ 2GΩ	•	•	•	•
125V	0.1MΩ ~ 1GΩ			•	•
100V	0.1MΩ ~ 800MΩ			•	•
50V	0.1MΩ ~ 400MΩ			•	•
10V	0.1MΩ ~ 80MΩ				
Accuracy		0.1MΩ~4GΩ : ±3%rdg		4GΩ~8GΩ : ±5%rdg	
PI=Polarization Index		•	•		•
DAR=Dielectric Absorption Ratio		•	•		•
<b>Metal Oxide Varistor(MOVs) &amp; Gas Arrester(GAS) Voltage Result @ 1mA</b>					
Test Voltage	Accuracy		•	•	•
5~1020V	±3%rdg ±2dgt				
<b>Continuity Short Circuit Current &gt; 220mA</b>					
Range	Accuracy				
0.01 ~ 100Ω	±1%rdg	•	•	•	•
100 ~ 300Ω	±1.5%rdg	•	•	•	•
300~1999Ω	±2%rdg	•	•	•	•
Auto-Null	Up to 5Ω	•	•	•	•
Buzzer	Threshold Value	•	•	•	•
	Up to 3Ω	•	•	•	•
<b>Voltmeter (Autoranging)</b>					
Range	Accuracy & Resolution				
0 ~ 700Vac	±1.5% F.S. ±1V	•	•	•	•
0 ~ 950Vac	±1.5% F.S. ±1V	•	•	•	•
0 ~ 100Vac	±1.5% F.S. ±1V				
0 ~ 100Vdc	±1.5% F.S. ±1V				
Auto-Hold		•	•	•	•
<b>General</b>					
Battery load current	About 300mA				
OLED type	Large Type 2 × 16 Characters				
Auto-off	Approx. 5 minutes				
Fuse	Fast HBC 500mA 250V (5 × 20mm)				
Operating temperature	0°C to 40°C not in full sun				
Storage temperature	-10°C to 50°C				
Dimensions	175(L) × 85(W) × 75(D)mm				
Weight (battery included)	Approx. 655g				
Power source	Alkaline 1.5V (AA) × 8				
Auto discharge on all test and all ranges	√				
Safety standard	IEC / EN 61010-1 CAT III 600V EN 61326-1				
Accessories	Instruction manual	Test leads	Shoulder belt	Soft pouch	Batteries