

# Insulation & Multi-function Tester(LCD)



**4101 IN**



**4102 MF**

## FEATURES

- **Microprocessor-controlled.**
- Measures Insulation Resistance, voltage (AC-DC) measurements
- Automatic hold facility.
- Continuity test with a short circuit current of minimum 200mA.
- MOV and Gas Arrester Testing.(4102 MF)
- Energy conservation is feature.

- EnerSave™ limits the test duration to about 10 Seconds to save energy.
- No moving parts. All calibration are saved internally in a non volatile memory.
- Easy calibration at any facility around the world.
- Low cost maintenance, calibration, and ownership.
- Complies to all the latest regulations, including UK.

## FEATURES COMPARISON

	4101 IN	4102 MF
Digital EE Calibration (No Potentiometers)	●	●
Keypad Operation	●	●
Automatic Voltmeter AC/DC at Start/Reset	●	●
ON-Reset/Restart Key	●	●
Off Push Button(press more than 5 Sec on 1kV key)	●	●
Auto-off	●	●
Test ON-OFF	●	●
Polarization Index(PI) on 250, 500 and 1000V	●	●
Dielectric Absorption Ratio (DAR) on 250, 500 and 1000V	●	●
Battery Test	Test Battery at Start	Test Battery at Start
Battery Test at Switch ON / Reset	●	●
Voltmeter on request by Keypad	Automatic	Automatic
Safety Voltmeter before each Test	●	●
Auto-Discharge on all Test and all Ranges	●	●
Continuity Short Circuit Current > 220mA (225mA Typical)	●	●
Continuity Open Circuit Voltage of 5V dc	●	●
Nominal Voltage @ 1mA on all Insulation Ranges	●	●
Buzzer ON/OFF	Always ON	Always ON
Leads Auto-Null key	●	●
Test Auto-Stop	●	●
Re-programmable Microprocessor for Easy Updates	●	●
Can be calibrated in ALL calibration laboratories	●	●
Insulation measurement from 2kΩ (250V range)to 8GΩ (1kV Range)	●	●
Continuity from 0.01Ω (220mA) to 1999Ω	●	●
DC Voltmeter from ± 1Vdc to ±950Vdc	●	●
AC Voltmeter from 1 Vac to 700 Vac	●	●
Accept 8 Rechargeable Batteries or Alkaline or normal	●	●
Smart Hold & Stop on Voltmeter ac / dc	●	●
MOV / Protection Devices Test	●	●
Gas Arrester Function	●	●
Ener Save™	●	●

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## SPECIFICATIONS

	4101 IN	4102 MF
<b>Insulation Test</b>		
Test voltage (DC V)	250V / 500V / 1000V	250V / 500V / 1000V
Output voltage @ 1mA	Rated test Voltage +10% Max	Rated test Voltage +10% Max
Measuring ranges	0.2M~2G / 0.2M-4G / 0.2M-8GΩ	0.2M~2G / 0.2M-4G / 0.2M-8GΩ
Accuracy	0.2M~4GΩ : ±3%rdg 4GΩ~8GΩ : ±5%rdg	0.2M~4GΩ : ±3%rdg 4GΩ~8GΩ : ±5%rdg
When voltage is constant, Current is limited at	1.2mA	1.2mA
Short circuit current	4mA Max.	4mA Max.
<b>Continuity Test</b>		
Measuring ranges	0.01-1999Ω	0.01-1999Ω
Accuracy	0.01-100Ω : ±1.0%rdg 100-300Ω : ±1.5%rdg 300-1999Ω : ±2.0%rdg	0.01-100Ω : ±1.0%rdg 100-300Ω : ±1.5%rdg 300-1999Ω : ±2.0%rdg
Short circuit current	>220mA	>220mA
Open circuit voltage	5V dc	5V dc
Resolution	±2 counts	±2 counts
<b>Voltmeter</b>		
AC voltage (Auto)	0-700V	0-700V
DC voltage (Auto)	0-950V	0-950V
Accuracy	±1.5% rdg	±1.5% rdg
Resolution	±1V	±1V
<b>MOV Test &amp; GAS Arrester Test</b>		
Test voltage	—	5-1020Vdc
Voltage result accuracy	—	±3% rdg
Voltage result resolution	—	±2 counts
<b>Protections</b>		
Over load	700V (between all terminals)	
Over voltage	Class III-700V towards ground	
Fuse	500mA 250V, (5 × 20mm), HBC, Fast Blow	
<b>General</b>		
Display	2 lines × 16 characters LCD	
Auto-null threshold	5Ω	
Buzzer threshold	3Ω	
Fast test	10Sec	
Long test	60Sec	
With PI and DAR test function	10Min	
Load battery test current	About 300mA	
Operating temperature	0°C to 40°C not in full sun	
Storage temperature	-10°C to 50°C	
Dimensions	250(L) × 190(W) × 110(D)mm	
Weight (battery included)	Approx 1460g.	
Power source	1.5V(AA) × 8	
Safety standard	EN 61010-1 CAT III 600V EN 61326-1	—
Accessories	Instruction manual Test leads Shoulder belt Batteries	