

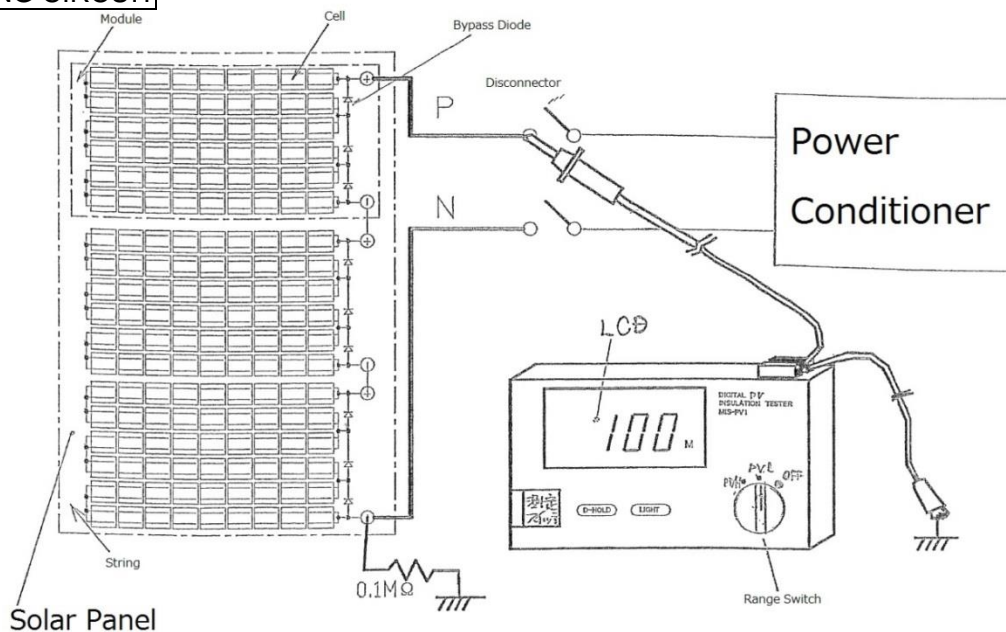
INSULATION RESISTANCE TESTER FOR PV SYSTEMS

Model MIS-PV1

The model MIS-PV1 is an insulation resistance tester for the exclusive use in photovoltaic systems. The ordinary insulation resistance testers cannot make measurement properly during generation of PV systems. This instrument, however, can measure the insulation resistance simply by touching probe to the live line whether making generation or not. There are two ranges of PVH and PVL. PVH is for high voltage generation system (more than 500V and less than 1000V) and PVL is for the system less than 500V.



MEASURING CIRCUIT



SPECIFICATIONS

1. MEASURING PART

Rating

Range	Rated Measuring Voltage	Effective Max. Display	Center Displayed Value
PVL	500V	100MΩ	2MΩ
PVH	1000V	2000MΩ	50MΩ

Measuring Range

Range	Rating	Measuring Range
PVL	500V/100MΩ	0~100MΩ~OL(∞)
PVH	1000V/2000MΩ	0~2000MΩ~OL(∞)

Tolerance

Range	Rated Measuring Voltage/ Effective Max. Display	Measuring Range	Tolerance
PVL	500V/100MΩ	(First Effective Range) More than 0.1 MΩ, less than 50MΩ	Less than ±5%
		(Second Effective Range) More than 0.05MΩ, less than 0.1MΩ More than 50MΩ, less than 100MΩ	Less than ±10%
PVH	1000V/2000MΩ	(First Effective Range) More than 2 MΩ, less than 1000MΩ	Less than ±5%
		(Second Effective Range) More than 1MΩ, less than 2MΩ More than 1000MΩ, less than 2000MΩ	Less than ±10%

Rated Measuring Current

Range/Rated Measuring Voltage	Min. Resistance to maintain Rated Voltage	Rated Measuring Current
PVL/500V	0.5MΩ	1mA
PVH/1000V	1MΩ	-0%~+20%

Open Circuit Voltage	:less than 130% of rated measuring voltage
Short Circuit Current	:less than 2mA
Temperature Influence	:When changing the ambient temperature from 20°C to ±20°C, the change of displayed value at 20°C is less than ±5% at max. , min. and ceter display of the first effective range.
Response Time	:less than 10 sec. (Auto-range)
Protection of Mis-input	:no abnormal condition when loading 1.2 times of rated measuring AC voltage with nearby 50Hz or 60Hz sine wave for 10 sec.
Display Ranges	:3.200/32.00/320.0/3200(4 range auto)
Minimum Resolution	:0.001 MΩ
A/D Conversion	:dual integration mode
Display	:3 ¹ / ₂ digit LCD, max. reading of 3200 with bar graph and annunciator
Over Range Indication	:“OL” mark on LCD
Low Battery Indication	:“B” mark on LCD, less than 7.8±0.2V
Data Hold Indication	:“DH” mark on LCD
Auto Power Off	:automatically power off, approx. 10 minutes after power on (To release this function, put the rotary switch to off and power on again)

2. OTHER FUCTION

Open Circuit Discharge	:cancel the stored DC electrical charge by automatic discharging function, can confirm discharge by becoming HV lamp off.
Back Light Fuction	:By pressing back light switch (LIGHT) once, back light will appear and will become off by pressing once more. This back light will become off automatically 10 minutes after lighting on.

3. GENERAL SPECIFICATION

Operating Temperature	:0°C~40°C, less than 80%RH (w/o condensing)
Storage Temperature	:-20°C~60°C, less than 80%RH (w/o condensing)
Withstanding Voltage	:AC3700V/1 minute (between electric circuit and outer case)
Power Supply	:1.5V (AA size, LR6) alkali battery x 6 pcs.
Dimension & Weight	:170(W)x105(D)x52(H)mm, approx. 350g (without batteries)
Standard Accessories	:line test lead 1 pce., earth test lead 1 pce., batteries 6 pcs., test lead case 1 pce., instruction manual 1 pce.