

# HIGH VOLTAGE INSULATION TESTERS



5000V

**KEW 3127**

CAT IV 600V DC AC V USB AUTO POWER OFF Bluetooth

- Insulation Resistance up to 10TΩ
- Short-Circuit Current up to 5mA
- Wide Test Voltage from 250V to 5000V
- Diagnostic Insulation Tests: IR, PI, DAR, DD, SV, RAMP.
- Wireless communication by Bluetooth for transferring and showing real-time data to PC and Android device.
- Memory and Logging functions.
- Filter function reduces noise interference.
- Robust design for field use with IP65 (lid closed).
- Powered by rechargeable battery.

## Function

**PI DAR DD SV RAMP**

		3127								
Insulation resistance										
Test voltage	250V *1	500V	1000V	2500V	5000V					
Max measurement value	9.99GΩ	99.9GΩ	199GΩ	999GΩ	9.99TΩ					
Accuracy	0.0 - 99.9MΩ ±5%rdg±3dgt	0.0 - 999MΩ ±5%rdg±3dgt	0.0 - 1.99GΩ ±5%rdg±3dgt	0.0 - 99.9GΩ ±5%rdg±3dgt	0.0 - 99.9GΩ ±5%rdg±3dgt	0.0 - 99.9GΩ ±5%rdg±3dgt				
Short circuit current	Max 5.0mA									
Output voltage	Accuracy Variable Monitor	-10 - +10% -10 - +20% -	0 - +20%		-20% - 0% (5%step)					
	Voltage measurement	Current measurement	Capacitance measurement							
Measuring range	AC:30 - 600V (50/60Hz) DC:±30 - ±600V	0.00nA - 5.50mA	5.0nF - 50.0μF *2							
Accuracy	±2%rdg±3dgt	±10%rdg*3	±5%rdg±5dgt							
Power source	Rechargeable Battery (Lead-acid Battery) 12V*4 Charging power : DC 15VA MAX									
Communication Interface	Bluetooth:Ver2.1 + EDR Class2 , USB:Ver1.1									
Applicable Standards	IEC 61010-1, 61010-2-030 CAT IV 600V Pollution degree2, IEC 61326-1, 2-2									
Dimension	208(L) x 225(W) x 130(D) mm (Hard case 380(L) x 430(W) x 154(D) mm)									
Weight	3127:4kg Approx. (including battery), Total:8kg Approx. (including Accessories)									
Accessories	7165A(Line probe), 7224A(Earth cord), 7225A(Guard cord), 8019(Hook type prod), 8327EU(Power adaptor 15V/1A), 9171(Carrying case[Hard]), Instruction manual									
Optional	7168A(Line probe with alligator clip:3m), 7253(Length line probe with alligator clip:15m), 8258(USB communication set), 8302(Adapter for recorder 1mV/1μA)									

\*1) IR mode only \*2) At 5000V range 5.0nF-25.0μF \*3) Determined by resistance and Voltage values (over 10MΩ) \*4) No measurements are possible while charging   ※ Bluetooth is a registered trademark of the Bluetooth SIG, Inc.

## Data Communication Function

- Transferring and showing real-time data to PC and Android tablet
- Recorded data can be transferred (PC only)
- Analyzing of the saved data (PC only)



※Free Android software is available on download site

## Optional Accessories



System requirements  
OS: Windows®/Vista/7/8/10  
Display: XGA (Resolution 1024 x 768 dots) or more  
Hard-disk: Space required 100Mbyte or more  
Others: With CD-ROM drive and USB port  
\* Windows® is a registered trademark of Microsoft in the United States.

## Diagnostic Insulation Tests

**PI**

### Polarization Index

PI =  $\frac{\text{Insulation resistance value 10 min. after start}}{\text{Insulation resistance value 1 min. after start}}$

Criteria	4.0 or more	4.0-2.0	2.0-1.0	1.0 or less
Criteria	Best	Good	Warning	Bad

**DAR**

### Dielectric Absorption Ratio

DAR =  $\frac{\text{Insulation resistance value 1 min. after start}}{\text{Insulation resistance value } *15 \text{ sec. after start}}$

DAR	1.4 or more	1.25-1.0	1.0 or less
Criteria	Best	Good	Bad

\*User>Selectable 15sec. or 30sec. interval

**DD**

### Dielectric Discharge

DD =  $\frac{\text{Current value 1 min. after completing (mA)}}{\text{Voltage value when a measurement complete (V) } \times \text{Capacitance (F)}}$

DD	2.0 or less	2.0-4.0	4.0-7.0	7.0 or more
Criteria	Good	Warning	Poor	Very poor