

## Analogue Insulation Tester

### MODEL **3165 / 3166**

- 500V/1000M $\Omega$ (Model 3165)
- 1000V/2000M $\Omega$  (Model 3166)
- Expanded megohm scale for easy reading.
- New robust housing case to prevent damage.
- AC voltmeter scale for easy reading.
- Neck strap for both hand's operation.



MODEL	3165	3166
Insulation Resistance		
DC Test Voltage	500V	1000V
Max. Effective Scale Value	1000M $\Omega$	2000M $\Omega$
Mid-Scale Value	20M $\Omega$	50M $\Omega$
First Effective Measuring Range	1~500M $\Omega$	2~1000M $\Omega$
Accuracy	$\pm 5\%$ rdg	
Second Effective Measuring Range	0.5/1000M $\Omega$	1/2000M $\Omega$
Accuracy	$\pm 10\%$ rdg	
AC Voltage	600V	
Accuracy	$\pm 3\%$ of full scale value	
Withstand Voltage	3700V AC for 1 minute	
Power Source	R6P (AA) (1.5V) $\times$ 4	
Dimensions	90(L) $\times$ 137(W) $\times$ 40(D)mm	
Weight	330g approx.	
Accessories	7025 (Test leads) 9067 (Pouch for test lead) Neck Strap R6P (AA) $\times$ 4 Instruction Manual	

### MODEL **3144A / 3145A / 3146A / 3161A**

- Miniature lightweight insulation tester. It weighs only 340g(battery included), but carries full measurement functions.
- Automatic discharge of circuit capacitance.
- Test leads with remote control switch.
- New robust housing case.
- Back light function.
- Neck strap for both hand's operation.



MODEL	3144A	3145A	3146A	3161A
Insulation Resistance				
DC Test Voltage	250V/500V	125V/250V	50V/125V	15V/500V
Max. effective scale value	50MΩ/100MΩ	20MΩ/50MΩ	10MΩ/20MΩ	20MΩ/100MΩ
Mid-Scale Value	1MΩ/2MΩ	0.5MΩ/1MΩ	0.2MΩ/0.5MΩ	0.05MΩ/2MΩ
First Effective Measuring Ranges	0.05~20MΩ/ 0.1~50MΩ	0.02~10MΩ/ 0.05~20MΩ	0.01~5MΩ/ 0.02~10MΩ	0.005~2MΩ/ 0.1~50MΩ
Accuracy	±5% of Indicated Value			
Second Effective Measuring Ranges	Measuring ranges other than above, 0 and ∞			
Accuracy	±10% of Indicated Value			
AC Voltage	600V	300V	300V	600V
Accuracy	±3% of Full Scale			
Safety Standard	IEC/EN 61010-1 CAT.III 300V,CAT.II 600V			
Withstand Voltage	3700V AC for 1 minute			
Power Source	R6P (AA) (1.5V) × 4			
Dimensions	90(L) × 137(W) × 40(D) mm			
Weight	340g approx.			
Accessories	7149 (Test Lead with Remote Control Switch Set) Neck Strap R6P (AA) × 4 Instruction Manual			
Optional	7116 (Extension Probe) 8016 (Pickel Type Prod)			

MODEL **3315 / 3316**

- 4 test voltages plus AC voltage range.
- Colour coded scales and range switch position for easy reading.
- Test leads with remote control switch.
- New robust housing case.
- Back light function.
- Neck strap for both hand's operation.



MODEL	3315	3316
Insulation Resistance		
DC Test Voltage	125V/250V/500V/1000V	50V/125V/250V/500V
Max. Effective Scale Value	20M $\Omega$ /50M $\Omega$ /100M $\Omega$ /2000M $\Omega$	10M $\Omega$ /20M $\Omega$ /50M $\Omega$ /100M $\Omega$
Mid-Scale Value	0.5M $\Omega$ /1M $\Omega$ /2M $\Omega$ /50M $\Omega$	0.2M $\Omega$ /0.5M $\Omega$ /1M $\Omega$ /2M $\Omega$
First Effective Measuring Range Accuracy	0.02~10M $\Omega$ /0.05~20M $\Omega$ / 0.1~50M $\Omega$ /2~1000M $\Omega$ $\pm 5\%$ of Indicated Value	0.01~5M $\Omega$ /0.02~10M $\Omega$ / 0.05~20M $\Omega$ /0.1~50M $\Omega$
Second Effective Measuring Range Accuracy	10~20M $\Omega$ /20~50M $\Omega$ / 50~100M $\Omega$ /100~2000M $\Omega$ $\pm 10\%$ of Indicated Value	5~10M $\Omega$ /10~20M $\Omega$ / 20~50M $\Omega$ /50~100M $\Omega$
AC Voltage	600V	
Accuracy	$\pm 3\%$ of Full Scale Value (AC V range) $\pm 5\%$ of Full Scale Value (Except for AC V range)	
Safety Standard	IEC/EN 61010-1 CAT.III 600V,CAT.II 1000V	
Withstand Voltage	5550V AC for 1 minute	
Power Source	R6P (AA) (1.5V) $\times$ 6	
Dimensions	105(L) $\times$ 158(W) $\times$ 70(D)mm	
Weight	520g approx.	
Accessories	7150 (Test Lead with Remote Control Switch Set) 7081A (Test Lead for Guard Terminal):3315 Shoulder Strap R6P (AA) $\times$ 6 Instruction Manual	
Optional	7115 (Extension Probe) 8016 (Pickel Type Prod) 9089 (Carrying Case)	

MODEL **3321A / 3322A / 3323A**

- AC Voltmeter with linear, easy-to-read scales.
- Auto discharge function; any charge stored in the circuit under test will be automatically discharged after testing.
- Designed to meet IEC/EN 61010-1 CAT.III 600V, CAT.II 1000V
- Color-coded scales for easy reading.
- Back light function to facilitate working at dimly illuminated locations.
- Test lead set with remote control switch.
- Shoulder strap for hands free.



MODEL	3321A	3322A	3323A
Insulation Resistance			
DC Test Voltage	250V/500V/1000V	125V/250V/500V	25V/50V/100V
Max. Effective Scale Value	50MΩ/100MΩ/2000MΩ	20MΩ/50MΩ/100MΩ	10MΩ/10MΩ/20MΩ
Mid-Scale Value	1MΩ/2MΩ/50MΩ	0.5MΩ/1MΩ/2MΩ	0.2MΩ/0.2MΩ/0.5MΩ
First Effective Measuring Range	0.05~20MΩ (250V)	0.02~10MΩ (125V)	0.01~5MΩ (25V)
	0.1~50MΩ (500V)	0.05~20MΩ (250V)	0.01~5MΩ (50V)
	2~1000MΩ (1000V)	0.1~50MΩ (500V)	0.02~10MΩ (100V)
Accuracy	±5% of Indicated Value		
Second Effective Measuring Range	20~50MΩ (250V)	10~20MΩ (125V)	5~10MΩ (25V)
	50~100MΩ (500V)	20~50MΩ (250V)	5~10MΩ (50V)
	1000~2000MΩ (1000V)	50~100MΩ (500V)	10~20MΩ (100V)
Accuracy	±10% of Indicated Value		
AC Voltage	600V		
Accuracy	±3% of Full Scale Value (AC V range)		
	±5% of Full Scale Value (Except for AC V range)		
Safety Standard	IEC/EN 61010-1 CAT.III 600V,CAT.II 1000V		
Withstand Voltage	5550V AC for 1 minute		
Power Source	R6P (AA) (1.5V) × 6		
Dimensions	105(L) × 158(W) × 70(D)mm		
Weight	520g approx.		
Accessories	7150 (Test Lead with Remote Control Switch Set) 7081A (Guard Connection Lead): 3321A only Shoulder Strap R6P (AA) × 6 Instruction Manual		
Optional	7115 (Extension Probe) 8016 (Pickel Type Prod) 9089 (Carrying Case)		

## Analogue Insulation / Continuity Tester

MODEL **3131A**

The Model 3131A offers unmatched performance, and feature including test lead resistance zero adjustment for time-saving continuous operation, a clear ease to read illuminated scale, and a live circuit warning.

- Test insulation up to 100M $\Omega$  at 250V, 200M $\Omega$  at 500V, 400M $\Omega$  at 1000V and continuity up to 20 $\Omega$ .
- LIVE circuit warning lamp plus audible warning.
- Automatic discharge of circuit capacitance when TEST button is released.
- Fuse protected (continuity range only).
- Battery check LED.
- Front panel zero adjust.
- Back light function to facilitate working at dimly lit situations.
- PRESS TO TEST button with lock down feature.



#### Insulation Resistance

Test Voltage	250V/500V/1000V
Measuring Ranges (Mid-scale Value)	100M $\Omega$ /200M $\Omega$ /400M $\Omega$ (1M $\Omega$ ) (2M $\Omega$ ) (4M $\Omega$ )
Output Voltage on open circuit	Rated test voltage+20%, -0%
Nominal Current	1mA DC min.
Output Short Circuit Current	1.3 mA DC approx.
Accuracy	0.1~10M $\Omega$ /0.2~20M $\Omega$ /0.4~40M $\Omega$ (Accuracy Guaranteed Ranges) $\pm$ 5% of indicated value

#### Continuity

Measuring Ranges (Mid-scale Value)	2 $\Omega$ /20 $\Omega$ (1 $\Omega$ ) (10 $\Omega$ )
Output Voltage on open circuit	4~9V DC
Measuring Current	200mA DC min.
Accuracy	$\pm$ 3% of scale length

#### General

Safety Standard	IEC 61010-1 CAT.III 300V Pollution Degree 2 IEC 61010-2-031 IEC 61557-1/2/4
IP Rating	IEC 60529-IP54
EMC Standard	IEC 61326-1
Withstand Voltage	3700V AC for 1 minute
Power Source	R6P (AA) (1.5V) $\times$ 6
Dimensions	185(L) $\times$ 167(W) $\times$ 89(D)mm
Weight	860g approx.
Accessories	7122A (Test leads) Pouch for test leads 8923 (F500mA/600V fuse) $\times$ 2 R6P (AA) $\times$ 6 Shoulder Strap

**MODEL 3132A**

- Dust and drip proof construction. (designed to IEC 60529 IP54)
- Designed to meet IEC 61010-1 and IEC 61557 safety standard.
- 1mA rated test current at the minimum resistance.
- 200mA measuring current on continuity testing.
- Automatic discharge of circuit capacitance. (Any charge stored in the circuit under test will be automatically discharged after testing.)
- Live circuit warning buzzer and neon lamp.
- Small and lightweight. Shock resistant new case material.
- AC voltmeter with linear, easy-to-read scale.
- Operates on AA, R6P×6 dry batteries.



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**Insulation Resistance**

Test Voltage	250V/500V/1000V
Measuring Ranges (Mid-scale Value)	100MΩ/200MΩ/400MΩ (1MΩ) (2MΩ) (4MΩ)
Output Voltage on open circuit	Rated test voltage+20%, -0%
Nominal Current	1mA DC min.
Output Short Circuit Current	1~2mA DC
Accuracy	0.1~10MΩ/0.2~20MΩ/0.4~40MΩ (Accuracy Guaranteed Ranges) ±5% of indicated value

**Continuity**

Measuring Ranges (Mid-scale Value)	3Ω/500Ω (1.5Ω) / (20Ω)
Output Voltage on open circuit	4.1V DC approx.
Measuring Current	210mA DC min.
Accuracy	±1.5% of scale length

**AC Voltage**

AC Voltage	0~600V AC
Accuracy	±5% of scale length

**General**

Safety Standard	IEC 61010-1 CAT.III 600V Pollution Degree 2 IEC 61010-2-031 IEC 61557-1/2/4
IP Rating	IEC 60529-IP54
EMC Standard	IEC 61326-1
Withstand Voltage	3700V AC for 1 minute



Power Source	R6P (AA) (1.5V) × 6
Dimensions	106(L) × 160(W) × 72(D)mm
Weight	560g approx.
Accessories	7122A (Test leads) Pouch for test leads 8923 (F500mA/600V fuse) × 2 R6P (AA) × 6 Shoulder Strap Instruction Manual

## Digital Insulation / Continuity Tester

### MODEL 3001B

Compact and lightweight digital Insulation / Continuity Tester.



Insulation Resistance	
Test Voltage	500V/1000V
Measuring Ranges (Mid-scale Value)	200MΩ (2/20/200MΩ) autoranging
Output Voltage on open circuit	Rated test voltage +12%
Rated Current	1~1.1mA DC approx.
Output Short Circuit Current	1.5mA DC approx.
Accuracy	±2%rdg±1dgt
Continuity Test	
Measuring Ranges (Mid-scale Value)	200Ω (20/200Ω) autoranging
Output Voltage on open circuit	600mV DC approx.
Output Short Circuit Current	6mA approx.
Accuracy	±2%rdg±0.1Ω ±1dgt
General	
Withstand Voltage	2200V AC for 1 minute
Power Source	R6P (AA) (1.5V) × 8
Dimensions	144(L) × 93(W) × 61(D)mm
Weight	460g approx.

#### Accessories

7025 (Test leads)  
Pouch for test leads  
9050 (Carrying Case)  
R6P (AA) × 8  
Instruction Manual

#### MODEL

### 3005A

- Bargraph to display insulation resistance.
- Displays the value of external AC voltage along with flashing symbol.
- Auto null function to automatically subtract the test lead resistance before displaying the real continuity resistance value.
- Live circuit warning beeper.
- Releasing the test button automatically discharges the charges stored in the circuit under test.
- 200mA continuity measuring current to IEC 61557.
- Minimum 1mA current on insulation tests to IEC 61557.



#### Insulation Resistance

Test Voltage	250V/500V/1000V
Measuring Ranges (Mid-scale Value)	20MΩ/200MΩ/2000MΩ
Output Voltage on open circuit	Rated test voltage+20%, -0%
Nominal Current	1mA DC min.
Output Short Circuit Current	1.5 mA DC approx.
Accuracy	±1.5%rdg±5dgt (20MΩ/200MΩ) ±10%rdg±3dgt (2000MΩ)

#### Continuity Test

Measuring Ranges (Mid-scale Value)	20Ω/200Ω/2000Ω
Output Voltage on open circuit	7~12V DC
Measuring Current	200mA DC min.
Accuracy	±1.5%rdg±5dgt (20Ω) ±1.5%rdg±3dgt (200Ω/2000Ω)

#### AC Voltage

AC Voltage range	0-600V AC
Accuracy	±5%rdg±3dgt

#### General

Safety Standard	IEC 61010-1 CAT.III 300V Pollution Degree 2 IEC 61010-2-031 IEC 61557-1/2/4
IP Rating	IEC 60529-IP54
EMC Standard	IEC 61326-1



Withstand Voltage	3700V AC for 1 minute
Power Source	R6P (AA) (1.5V) × 8
Dimensions	185(L) × 167(W) × 89(D)mm
Weight	970g approx
Accessories	7122A (Test leads) Pouch for test leads 8923 (F500mA/600V fuse) × 2 R6P (AA) × 8, Shoulder Strap Instruction Manual

## MODEL 3007A

- Bargraph to display insulation resistance.
- Displays the value of external AC voltage along with flashing symbol.
- Auto null function to automatically subtract the test lead resistance before displaying the real continuity resistance value.
- Trac-Lok mode to conserve battery life on insulation and continuity tests.
- Live circuit warning beeper.
- Releasing the test button automatically discharges the charges stored in the circuit under test.
- Backlight function to view the test results in dimly lit areas.
- 200mA continuity measuring current to IEC 61557.
- Minimum 1mA current on insulation tests to IEC 61557.



### Insulation Resistance

Test Voltage	250V/500V/1000V
Measuring Ranges (Mid-scale Value)	20MΩ/200MΩ/2000MΩ
Output Voltage on open circuit	Rated test voltage+20%, -0%
Nominal Current	1mA DC min.
Output Short Circuit Current	1.5 mA DC approx.
Accuracy	±1.5%rdg±5dgt (20MΩ/200MΩ) ±10%rdg±3dgt (2000MΩ)

### Continuity Test

Measuring Ranges (Mid-scale Value)	20Ω/200Ω/2000Ω
Output Voltage on open circuit	7~12V DC
Measuring Current	200mA DC min.
Accuracy	±1.5%rdg±5dgt (20Ω) ±1.5%rdg±3dgt (200Ω/2000Ω)

### AC Voltage

AC Voltage range	0-600V AC
Accuracy	±5%rdg±3dgt

### General

Safety Standard	IEC 61010-1 CAT.III 300V Pollution Degree 2 IEC 61010-2-031 IEC 61557-1/2/4
IP Rating	IEC 60529-IP54
EMC Standard	IEC 61326-1
Withstand Voltage	3700V AC for 1 minute
Power Source	R6P (AA) (1.5V) × 8
Dimensions	185(L) × 167(W) × 89(D)mm
Weight	990g approx
Accessories	7122A (Test leads) Pouch for test leads 8923 (F500mA/600V fuse) × 2 R6P (AA) × 8 Shoulder Strap Instruction Manual

KEW

## 3021 / 3022 / 3023

- 3 functions in one unit, insulation test with 4 voltage ranges, continuity test, AC voltage measurement
- 200mA measuring current on continuity testing
- Comparator function with PASS / FAIL and buzzer
- 0Ω adjustment at continuity measuring range
- Memory function up to 99 data
- Backlight LCD provides easy reading in dark locations
- Safety lock system prevents an erroneous operation on 500 and 1000 Volt ranges
- Safety standard IEC 61010-01 CAT.III  
□ 00V



### Comparator Function

Select and set the standard resistance value in each measuring range, and compare it with readings.

Notice the result of comparison by the **FAIL** or **PASS** sign on the display, and by buzzer sound at same time.

Buzzer can be set either for **FAIL** or **PASS** at your choice.



KEW

## 3021

Insulation resistance				
Test voltage	125V	250V	500V	1000V
Measuring range (Auto range)	4.000/40.00/200.0MΩ	4.000/40.00/400.0/2000MΩ		
First Effective Measuring range	0.1~20MΩ	0.1~40MΩ	0.1~200MΩ	0.1~1000MΩ
Mid-scale value	5MΩ		50MΩ	

Accuracy	±2%rdg±6dgt			
Second effective measuring range lower	0~0.099MΩ			
Second effective measuring range upper	20.01~200.0MΩ	40.01~2000MΩ	200.1~2000MΩ	1001~2000MΩ
Accuracy	±5%rdg±6dgt			
Rated current	DC 1~1.2mA			
Output short circuit current	1.5mA max			
Ω/Continuity				
Auto range	40.00/400.0Ω			
Accuracy	±2%rdg±8dgt			
Output Voltage on open circuit	5V±20%			
Output short circuit current	DC 220±20mA			
Fuse	Quick acting ceramic fuse 0.5A/600V (Ø6.35×32mm)			
AC Voltage				
Range	AC 20~600V (50/60Hz) DC -20~-600V/+20~+600V			
Accuracy	±3%rdg±6dgt			
General				
Applicable standards	IEC 61010-1 CAT.III 600V, IEC 61557-1,2,4, IEC 61326-1 (EMC), IEC 60529 (IP40)			
Dimensions / Weight	105(L) × 158(W) × 70(D)mm / 600g approx.			
Power source	R6P×6 or LR6×6			
Accessories	7150 (Test lead with remote control switch set), 9121 (Shoulder strap), R6P (AA)×6, Instruction Manual			
Optional	7115 (Extension Probe), 8016 (Pickel Type Prod), 8923 (Fuse [0.5A/600V]), 9089 (Carrying Case)			

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## 3022

Insulation resistance				
Test voltage	50V	100V	250V	500V
Measuring range (Auto range)	4.000/40.00/200.0MΩ		4.000/40.00/400.0/2000MΩ	
First Effective Measuring range	0.1~20MΩ		0.1~40MΩ	0.1~200MΩ
Mid-scale value	5MΩ		50MΩ	
Accuracy	±2%rdg±6dgt			
Second effective measuring range lower	0~0.099MΩ			
Second effective measuring range upper	20.01~200.0MΩ		40.01~2000MΩ	200.1~2000MΩ
Accuracy	±5%rdg±6dgt			
Rated current	DC 1~1.2mA			
Output short circuit current	1.5mA max			
Ω/Continuity				
Auto range	40.00/400.0Ω			
Accuracy	±2%rdg±8dgt			
Output Voltage on open circuit	5V±20%			

Output short circuit current	DC 220±20mA
Fuse	Quick acting ceramic fuse 0.5A/600V (Ø6.35×32mm)
AC Voltage	
Range	AC 20~600V (50/60Hz) DC -20~-600V/+20~+600V
Accuracy	±3%rdg±6dgt
General	
Applicable standards	IEC 61010-1 CAT.III 600V, IEC 61557-1,2,4, IEC 61326-1 (EMC), IEC 60529 (IP40)
Dimensions / Weight	105(L) × 158(W) × 70(D)mm / 600g approx.
Power source	R6P×6 or LR6×6
Accessories	7150 (Test lead with remote control switch set), 9121 (Shoulder strap), R6P (AA)×6, Instruction Manual
Optional	7115 (Extension Probe), 8016 (Pickel Type Prod), 8923 (Fuse [0.5A/600V]), 9089 (Carrying Case)

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## 3023

Insulation resistance				
Test voltage	100V	250V	500V	1000V
Measuring range (Auto range)	4.000/40.00/200.0MΩ 4.000/40.00/400.0/2000MΩ			
First Effective Measuring range	0.1~20MΩ	0.1~40MΩ	0.1~200MΩ	0.1~1000MΩ
Mid-scale value	5MΩ		50MΩ	
Accuracy	±2%rdg±6dgt			
Second effective measuring range lower	0~0.099MΩ			
Second effective measuring range upper	20.01~200.0MΩ	40.01~2000MΩ	200.1~2000MΩ	1001~2000MΩ
Accuracy	±5%rdg±6dgt			
Rated current	DC 1~1.2mA			
Output short circuit current	1.5mA max			
Ω/Continuity				
Auto range	40.00/400.0Ω			
Accuracy	±2%rdg±8dgt			
Output Voltage on open circuit	5V±20%			
Output short circuit current	DC 220±20mA			
Fuse	Quick acting ceramic fuse 0.5A/600V (Ø6.35×32mm)			
AC Voltage				
Range	AC 20~600V (50/60Hz) DC -20~-600V/+20~+600V			
Accuracy	±3%rdg±6dgt			
General				
Applicable standards	IEC 61010-1 CAT.III 600V, IEC 61557-1,2,4, IEC 61326-1 (EMC), IEC 60529 (IP40)			
Dimensions / Weight	105(L) × 158(W) × 70(D)mm / 600g approx.			
Power source	R6P×6 or LR6×6			
Accessories	7150 (Test lead with remote control switch set), 9121 (Shoulder strap), R6P (AA)×6, Instruction Manual			

Optional	7115 (Extension Probe), 8016 (Pickel Type Prod), 8923 (Fuse [0.5A/600V]), 9089 (Carrying Case)
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## High Voltage Insulation Tester

### **MODEL**    **3121 / 3122 / 3123**

- Dual scales for low and high ranges which change automatically. Colour coded scales for easy reading plus LED's that illuminate in matching colour.
- Drip proof construction.
- Hard carrying case furnished as standard accessory.
- Designed for low power consumption.



MODEL	3121	3122	3123	
DC Test Voltage	2500V	5000V	5000V	10000V
Measuring Ranges (automatic change)	2GΩ/100GΩ (autoranging)	5GΩ/200GΩ (autoranging)	5GΩ/200GΩ (autoranging)	10GΩ/400GΩ (autoranging)
First Effective Measuring Ranges	0.1~50GΩ	0.2~100GΩ	0.2~100GΩ	0.4~200GΩ
Accuracy	±5% rdg			
Other ranges Accuracy	±10% rdg or 0.5% of scale length			
Withstand Voltage	5000V AC for 1 minute			
Power Source	R6P (AA) (1.5V) × 8			
Dimensions	200(L) × 140(W) × 80(D)mm			
Weight	1kg approx.			
Accessories	7058 (Test leads) 9039 (Hard Carrying Case) R6P (AA) × 8 Instruction Manual		7058 (Test leads) 9039 (Hard Carrying Case) 8019 (Pickel type prod) R6P (AA) × 8 Instruction Manual	
Optional	8019 (Pickel type prod) 8020 (Adaptor for recorder)		8020 (Adaptor for recorder)	

### **MODEL**    **3124**

- Permits a wide range of insulation testing up to 100GΩ at variable test voltage from 1kV to 10kV.
- DC voltage output for recorders.
- Output voltage is shown on the digital display.
- After tests, automatically discharges the charges stored in the circuit under test.
- Operated by rechargeable Nickel-Cadmium batteries.



DC Test Voltage	1k~10kV variable	1000V
Measuring Ranges (automatic change)	1.6GΩ/100GΩ (autoranging)	100MΩ
First Effective Measuring Ranges Accuracy	0.05~50GΩ ±10% rdg	1~100MΩ
Other ranges Accuracy	±1% of scale length	
Output Voltage and Set Voltage Indicate	DC 0~10kV ±2%rdg±2dgt	
Withstand Voltage	5000V AC for 1 minute	
Power Source	Ni-Cd rechargeable battery (1.2V) × 8	
Dimensions	200(L) × 140(W) × 80(D)mm	
Weight	1.5kg approx.	
Accessories	7082 (Lead for recorder) 7083 (Lead for battery charging) 7084 (Earth and guard leads) 8075 (120V) or 8080 (220V) (Battery charger) 9112 (Hard Carrying Case) Ni-Cd rechargeable battery × 8 Instruction Manual	

**MODEL** **3125**



- Wide range measurements from 500V to 5000V and up to 1000GΩ.
- Large digital display with Bar Graph indication and back light.
- Polarization Index measurement (PI).
- Timer measurement function.
- Indication of Output voltage and Discharge voltage.
- Auto-discharge function and Voltage output warning function.
- Auto power off and Battery Check.
- Safety standard IEC 61010-1 CAT.III 600V



Range	Insulation resistance				Voltage measurement
	500V	1000V	2500V	5000V	AC/DC V
Measuring range	0.0~99.9MΩ	0.0~99.9MΩ	0.0~99.9MΩ	0.0~99.9MΩ	30~600V
	100~999MΩ	100~999MΩ	100~999MΩ	100~999MΩ	AC/DC
		1.00~1.99GΩ	1.00~9.99GΩ	1.00~9.99GΩ	[50/60Hz]
			10.0~99.9GΩ	10.0~99.9GΩ	
				100~1000GΩ (1TΩ)	
Accuracy	±5%rdg ±3dgt	±5%rdg ±3dgt	±5%rdg ±3dgt	±5%rdg ±3dgt	±2%rdg ±3dgt
				±20%(100GΩ or more)	
Short Circuit Current	1.3mA approx.				-----
Rated test Current	1mA to 1.2mA at 0.5MΩ load	1mA to 1.2mA at 1MΩ load	1mA to 1.2mA at 2.5MΩ load	1mA to 1.2mA at 5MΩ load	-----
Open circuit voltage	500VDC +30% -0%	1000VDC +20% -0%	2500VDC +20% -0%	5000VDC +20% -0%	-----
Maximum display	999 Counts (1000 counts only at 1000GΩ)				630 Counts
Current consumption	About 1000mA (During measurement)				110mA approx.
Withstand Voltage Safety standard	5320V AC for 5 seconds IEC 61010-1 CAT.III 600V, pollution Degree 2				
Power supply	DC12V : R14×8				
Dimensions	205(L) × 152(W) × 94(D)mm				
Weight	1.8kg approx.				
Accessories	7165 (Line Probe) 7166 (Earth Cord) 7167 (Guard Cord) 8019 (Pickle Type Prod) 9124 (Hard Carrying Case) LR14×8pcs (Alkaline Battery Size) Instruction Manual				
Optional	8302 (Adaptor for recorder) 7168 (Line Probe)				

- Short-Circuit Current up to 5mA
- Wide range measurements from 500V to 5000V and up to 1TΩ
- Large digital display with Bar Graph indication and white LED back light
- Polarization Index measurement (PI), Dielectric Absorption Ratio (DAR)
- Filter function reduces noise interference for obtaining stable measurement
- Indication of Output voltage and Discharge voltage
- Auto-discharge function and Output voltage warning function
- Auto power off and Battery Indicator
- Safety standard IEC 61010-1 CAT.III 600V



**NEW**



Range	Insulation resistance				Voltage measurement
	500V	1000V	2500V	5000V	V AC/DC
Measuring range	0.0~99.9MΩ 100~999MΩ	0.0~99.9MΩ 100~999MΩ 1.00~1.99GΩ	0.0~99.9MΩ 100~999MΩ 1.00~9.99GΩ 10.0~99.9GΩ	0.0~99.9MΩ 100~999MΩ 1.00~9.99GΩ 10.0~99.9GΩ 100~1000GΩ (1TΩ)	30~600V AC/DC (50/60Hz)
Accuracy	±5%rdg ±3dgt	±5%rdg ±3dgt	±5%rdg ±3dgt	±5%rdg ±3dgt ±20%(100GΩ or more)	±2%rdg ±3dgt
Short Circuit Current	Max. 5mA				-----
Rated test Current	1mA to 1.2mA at 0.5MΩ load	1mA to 1.2mA at 1MΩ load	1mA to 1.2mA at 2.5MΩ load	1mA to 1.2mA at 5MΩ load	-----
Open circuit voltage	500VDC +30% -0%	1000VDC +20% -0%	2500VDC +20% -0%	5000VDC +20% -0%	-----
Maximum display	999 Counts (1000 counts only at 1000GΩ)				630 Counts
Current consumption	1000mA approx. (During measurement)				110mA approx.
Withstand Voltage	5320V AC for 5 seconds				
Applicable Standard	IEC 61010-1 CAT.III 600V Pollution degree 2 IEC 61010-031, IEC 61326				
Power source	DC12V : LR14×8 pcs.				
Dimensions	205(L) × 152(W) × 94(D)mm				
Weight	1.8kg approx.				
Accessories	7165A (Line probe), 7224A (Earth cord), 7225A (Guard cord) 8019 (Pickle type prod), 8254 (Extension prod), 9159 (Hard case) LR14 (Alkaline battery size C) × 8, Instruction manual, Calibration certificate				
Optional	7168 (Line probe with alligator clip), 8302 (Adaptor for recorder)				

- Microprocessor controlled high voltage insulation resistance tester with Diagnostic functions.
- Suitable for analyzing the insulation characteristics of cables, transformers, motors, generators, high-pressure switches, insulators, wiring installations, etc.
- 6 ranges: 500V, 1000V, 2500V, 5000V, 10000V, 12000V  
Fine adjustment of voltage setting at each range is also possible
- Graphic representation of the insulation resistance and leakage current versus time on large display with bar graph and backlight.
- Can be operated from built-in rechargeable battery or from AC line.
- Automatic discharge after test with monitoring of the discharge voltage.
- Internal memory can store about 43,000 data (max).
- Robust design for field use with IP64 rating (with lid closed).

NEW



Range	Insulation resistance (*) Accuracy is not guaranteed with setting of 250V or less					
Rated Voltage	500V	1000V	2500V	5000V	10000V	12000V
Max measurement Value	500GΩ	1,0TΩ	2,5TΩ	5,0TΩ	35,0TΩ	35,0TΩ
Accuracy	400k~50GΩ ±5%rdg±3dgt (*)	800k~100GΩ ±5%rdg±3dgt	2M~250GΩ ±5%rdg±3dgt	4M~500GΩ ±5%rdg±3dgt	8M~1TΩ ±5%rdg±3dgt	8M~1TΩ ±5%rdg±3dgt
	50G~500GΩ ±20%rdg (*)	100G~1TΩ ±20%rdg	250G~2.5TΩ ±20%rdg	500G~5TΩ ±20%rdg	1T~10TΩ ±20%rdg  10T~35TΩ Values are displayed, but accuracy isn't guaranteed	1T~10TΩ ±20%rdg  10T~35TΩ Values are displayed, but accuracy isn't guaranteed
Short circuit current	Max 5.0mA					
Load resistor to output rated voltage	0.5MΩ or more	1,0MΩ or more	2.5MΩ or more	5,0MΩ or more	20,0MΩ or more	24,0MΩ or more
Output voltage						
Rated voltage	500V	1000V	2500V	5000V	10000V	12000V
Monitor accuracy	±10%±20V	±10%±20V	±10%±20V	±10%±20V	±10%±20V	±10%±20V

Output accuracy	0~+20%	0~+10%	0~+10%	0~+10%	-5~+5%	-5~+5%
Selectable range	50~600V (in steps of 5V)	610~1200V (in steps of 10V)	1225~3000V (in steps of 25V)	3050~6000V (in steps of 50V)	6100~10000V (in steps of 100V)	10100~12000V (in steps of 100V)
Voltage measurement						
Measuring range	DCV : ±30~±600V, ACV : 30~600V (50/60Hz)					
Accuracy	±2%rdg±3dgt					
Current measurement						
Measuring range	0.00nA~2.40mA (Depending on the insulation resistance)					
Capacitance measurement						
Measuring range	5.0nF~50.0μF				5.0nF~1.0μF (display range: 5.0nF~50.0μF)	
Accuracy	±5%rdg±5dgt					
General						
Withstand voltage	AC8770V : between line terminal and enclosure / 5sec (50/60Hz) AC6880V : between the measuring terminal and enclosure / 5sec (50/60Hz) AC2330V : between the power connector and enclosure / 5sec (50/60Hz)					
Operating temperature & humidity range	-10°C~50°C /		Relative humidity 85% or less (when operating with an external power supply, no condensation)			
	0°C~40°C /		Relative humidity 85% or less (when operating with battery, no condensation)			
Storage temperature & humidity range	-20°C~60°C / Relative humidity 75% or less (no condensation)					
Applicable standards	IEC 61010-1 CAT.IV 600V Pollution degree 2, IEC 61010-031, IEC 61326, IEC 60529 (IP64): with the lid closed.					
Power source	Rechargeable Lead storage battery (12V)* Charging time: approx. 8 hours / AC Power supply (100V~240V, 50/60Hz) * Continuous measuring time: approx. 4 hours (a load of 100MΩ at the Insulation resistance 12000V Range.) approx. 2 hours (Max current consumption in range while rated currents are maintained.)					
Dimension	330 (L) × 410 (W) × 180 (D) mm *Instrument and Hard case					
Weight	9kg approx. (including battery) *Instrument and Hard case					
Accessories	7170 (Main cord), 7224 (Earth cord), 7225 (Guard cord), 7226 (Line probe), 7227 (Line probe with alligator clip), 8029 (Extension prod), 8212-USB-W (USB adaptor with KEW Windows (Software)), Instruction manual, Calibration Certificate					