

FOR ELECTRICAL SAFETY TESTERS

The separately sold accessories shown here can all be used with the withstanding voltage testers and insulation resistance testers shown in this catalog with the exception of the limiting conditions for each item. Since some of these accessories may not be able to be used with previous types not described in this catalog, please ask your dealer or the manufacturer when conditions are unclear.

■ Remote Control Box

This enables test on and reset operations to be performed by remote control.

● RC01-TOS

[one-hand operation/dimensions: 200W × 70H × 39D mm]

● RC02-TOS

[both-hands operation/dimensions: 330W × 70H × 39D mm]

☛ Accessory cable length: 1.5 m

Note: The optional Adapter DD-5P/6P (DIN to Mini DIN) is required for the connection with TOS7200



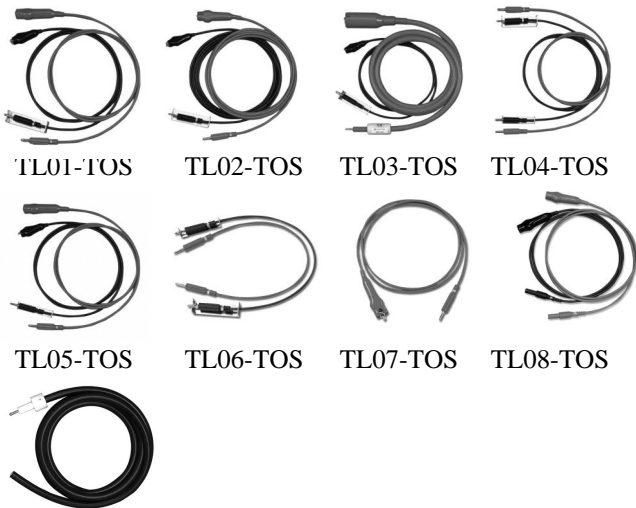
■ DIN Cable

DD-3 5P [cable length: 3m
(For RC01-TOS, RC02-TOS)]



■ High-Voltage Test Lead

- TL01-TOS [cable length: 1.5 m/max. operating voltage: 5 kV]
- TL02-TOS [cable length: 3 m/max. operating voltage: 5 kV]
- TL03-TOS [cable length: 1.5 m/max. operating voltage: 10 kV]
- TL04-TOS [cable length: 1.5 m/max. operating voltage: 5 kV (for TOS1200, RL01-TOS)]
- TL05-TOS [cable length: 1.5 m/max. operating voltage: 5 kV
(for TOS7000 series, 149-10A, RL01-TOS)]
- TL06-TOS [cable length: 0.5 m/max. operating voltage: 5 kV
(for parallel connection of TOS9220/9221)]
- TL07-TOS [cable length: 1.5 m/max. operating voltage: 5 kV (for TOS9220/9221)]
- TL08-TOS [cable length: 1.5 m/max. operating voltage: 1 kV (for TOS7200)]
- HTL-2.5DH [cable length: 1.5 m/max. operating voltage: 10 kV (for 149-10A)]



☛ Please contact your dealer or the manufacturer in cases when electrically insulated gloves, electrically insulated rubber sheets and so forth are required.

OPTIONS

■ High-Voltage Test Probe

(mainly for withstanding voltage testers)

These are handy probes for use with withstanding voltage testers. These probes employ a design in which all test switches on the probe can be pressed when holding onto the probe by its grip.

- HP01A-TOS [cable length: 1.5 m/max. operating voltage: 4 kV AC (RMS), 5 kV DC]

- HP02A-TOS [cable length: 3 m/max. operating voltage: 4 kV AC (RMS), 5 kV DC]



■ Low-Voltage Test Leads (for TOS6100/6200)

Test leads with alligator clips are to be used exclusively for earth continuity testing.

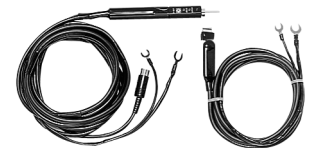
- TL11-TOS [cable length: 1.5 m / max. operating current: 30A]



■ Low-Voltage Test Probe (for TOS6100/6200)

This test probe is to be used exclusively for earth continuity testing. Test on and reset can be performed using the switch on the probe.

- LTP-2 [cable length: 2 m / max. operating current: 30A]



■ Warning Light Unit

This warning light unit is used to indicate the status of withstanding voltage testers (test or judgement). This unit can be turned on and off by a 100 V AC input or a make contact signal.

* This can not be used with TOS6200, TOS9200/9201, TOS7200

- PL01-TOS



■ Buzzer Unit

This buzzer unit is used when the volume obtained with the electronic buzzer incorporated in withstanding voltage testers is not sufficient. This unit can be turned on and off by a 100 V AC input or make contact signal.

* This can not be used with TOS6200, TOS9200/9201, TOS7200

- BZ01-TOS



TOS1200



Outlines

- Model TOS1200 Withstanding Voltage Tester Current Calibrator: For calibration of current sensitivity of withstanding voltage testers
- Calibration of Leakage Current Detection Sensitivity
As a result of containing an internal test load resistor, the TOS1200 enables switching of ammeter sensitivity and load resistance values automatically for easy calibration of the sensitivity of leakage current detection.
- Direct Reading of Error from Error Display Scale
The main scale consists of an error display scale ranging from -10% to +10% around a central full scale value. Thus, if the leakage current detection sensitivity of the withstanding voltage tester is a value of 1, 2 and 5 steps or 1, 2, 4 and 8 steps, the error can be read directly from the scale. The auxiliary scale consists of a ratio display scale in which the full scale value is taken to be 1.1, thereby enabling accommodation of values outside the range of the main scale.
- Ammeter Ranges
The ranges of the ammeter consist of 0.5, 1, 2, 5, 10, 20, 50 and 100 mA, and values equal to 0.8 times those values can be set. This is convenient for withstanding voltage testers of the type in which leakage current detection sensitivity is set digitally (1, 2, 4 and 8 steps).
- Eliminates Need for Power Supply
The TOS1200 offers outstanding portability since it does not require a power supply.
- AC/DC Selection Switch

Specifications

Measuring Function	Measurement of current values and error (%) for AC (50/60 Hz) and DC at a test voltage of 1000 V
Measuring Ranges	8 ranges consisting of 0.5/1/2/5/10/20/50/100 mA along with values equal to 0.8 times the values of those ranges (for 1, 2, 4 and 8 steps)
Ammeter Scale	Main scale: Direct-reading error display scale over a range of $\pm 10\%$ of the above full scale values Auxiliary scale: Ratio scale of 0 to 1.1 times the above full scale values (equivalent to 0% display of main scale when the ratio is equal to 1)
Ammeter Accuracy	Main scale: $\pm 1\%$ of reading Auxiliary scale: $\pm 3\%$ of full scale value
Ammeter Indication	DC/AC (sine wave rms value calibration of mean value response)
Load Resistance	

Range[mA]	Resistance[k Ω]	Range[mA]	Resistance[k Ω]
0.5	2000	10	100
1	1000	20	50
2	500	50	20
5	200	100	10

Allowed Input Time	0.5/1/2/5 mA ranges: Continuous 10/20/50/100 mA ranges: 60 sec. Max. 1/3 of duty cycle
Dimensions (MAX)	134W \times 164H \times 270D mm (140W \times 189H \times 320D mm)
Weight	approx. 3.5 kg
Accessories	TL04-TOS high-voltage test lead: 1

OPTIONS

FOR ELECTRICAL SAFETY TESTERS

149-10A



Outlines

- Model 149-10A High-Voltage Digital Voltmeter: Accommodation of Output Voltage Calibration of Withstanding Voltage and Insulation Resistance Testers
- Measurement of high voltages (AC/DC) of up to 10 kV maximum.
- Large 4½ digit LED display
- High measuring accuracy and input resistance
- Light weight of only 3.2 kg
- Compact design
- Excellent ease of maintenance

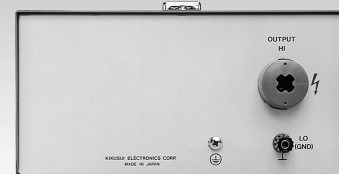
Specifications

Operating System	Double integration system (sampling cycle: 3 times/sec)
DC Voltage	Measuring range: 0.500kV to 10,000kV Accuracy: ±(0.5% of reading + 0.03% of range)
AC Voltage	Input resistance: 1000 MΩ ± 2% Measuring range: 0.500kV to 10,000kV Accuracy: ±(1% of reading + 0.05% of range) Frequency characteristics: 50/60 Hz (sine wave rms value display of mean value response) Input resistance: 1000 MΩ ± 2% Power Requirements 100V ± 10%, approx. 10 VA
Dimensions (MAX)	134W × 164H × 270D mm (140W × 189H × 350D mm)
Weight	approx. 3 kg
Accessories	TL05-TOS high-voltage test lead: 1 HTL-2.5DH high-voltage coaxial cable: 1

RL01-TOS



Rear Panel



■ Model RL01-TOS UL Resistance Load: Checking of Output Voltage of Withstanding Voltage Testers

This device is described in section 125, paragraph 2-1B1 of UL1492. The RL01-TOS is a variable load resistor for checking the output voltage of withstanding voltage testers used in dielectric strength testing on production lines. (Complies with UL regulations including UL1270, UL1409 and UL1410.)

Specifications

Resistors:	120, 159, 210, 279, 369, 489, 648, 858, 1,137, 1,500, 1,989 and 2,148 kΩ
Resistance Accuracy	+1%, -0% of nominal value when set to 120 kΩ, ±1% of nominal value when set to other values
Maximum Operating Voltage	1300 V (continuous rating)
Maximum Overload Voltage	1400 V for 5 seconds (application may not be repeated within 1 minute)
Dimensions (MAX)	200W × 100H × 260D mm (210W × 120H × 295D mm)
Weight	approx. 2.6 kg
Accessories	TL04-TOS high-voltage test lead: 2 TL05-TOS high-voltage test lead: 1