

EARTH TESTER FT6031-03

Field Measuring Instruments

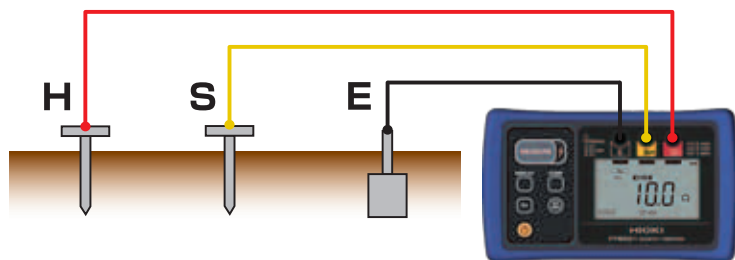


Tough and Ready for the Field

IP67 Dustproof and Waterproof



Precise Measurement for Earth Resistance



Utilizing Three-electrode Method

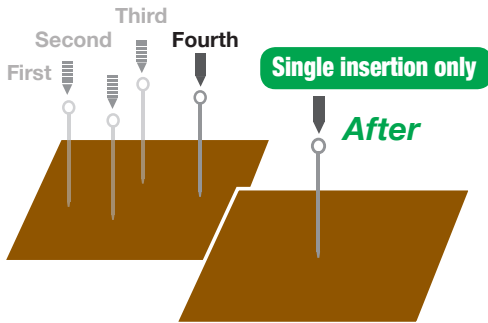


Dramatically faster setup, measurement, and cleanup

Single auxiliary grounding rod insertion

The FT6031-03 keeps the setup process easy, even if the auxiliary grounding rod has a high resistance value.

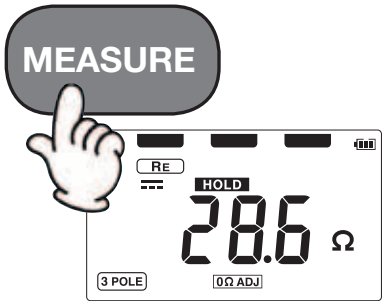
Before



The FT6031-03 eliminates the inconvenience of needing to make several attempts at getting a low enough resistance value for the rod, especially in dry soil.

One-touch automatic measurement

Measurement is easy: Simply press the MEASURE key.



The FT6031-03 automatically checks the ground potential, checks the auxiliary grounding electrode, and measures the grounding resistance. The instrument also selects the optimal range for the grounding resistance, eliminating the need to switch ranges and enabling efficient measurement.

Convenient measurement cord handling

The FT6031-03 features winders that keep measurement cords from getting tangled or twisted, ensuring easy rewinding.

Quick and Easy



Measurement cord cleanup is one of the most time-consuming parts of measuring grounding resistance. The FT6031-03's newly developed winders allow cords to be rewound about twice as quickly as with conventional reels.

Specifications

Guaranteed accuracy period: 1 year Temperature and humidity: 23°C ±5°C (73°F ±9°F): 80 % RH or less

Measurement system	Two-electrode method/three-electrode method (switchable)				
Range configuration	Range (auto range)	Display range	Resolution		Accuracy
			3 electrode	2 electrode	
	20 Ω	0 to 20.00 Ω	0.01 Ω*	—	±1.5 %rdg.±8 dgt.
	200 Ω	0 to 200.0 Ω	0.1 Ω	1 Ω	±1.5 %rdg.±4 dgt.
	2000 Ω	0 to 2000 Ω	1 Ω	1 Ω	±1.5 %rdg.±4 dgt.
Measuring frequency	128Hz±2Hz				
Measuring time	Three-electrode method: Within 8 seconds, Two-electrode method: Within 3 seconds				
Measurement current	Three-electrode method: 25 mA rms or less, Two-electrode method: 4 mA rms or less				
Resistance tolerance of auxiliary earthing electrode	20Ω range: 5kΩ, 200Ω range: 50kΩ, 2000Ω range: 50kΩ				
Earth potential measurement	0 to 30.0Vrms Accuracy: ±2.3 %rdg.±8 dgt. (50/60Hz), 1.3 %rdg.±4 dgt. (DC)				
Operating temperature and humidity	-10°C to 40°C (14°F to 104°F): 80 % RH or less (non-condensing), 40°C to 45°C (104°F to 113°F): 60 % RH or less (non-condensing), 45°C to 50°C (113°F to 122°F): 50 % RH or less (non-condensing)				
Storage temperature and humidity	-20°C to 60°C (-4°F to 140°F): 80 % RH or less (non-condensing)				
Operating environment	Indoor, outdoor (excluding farmland*) pollution degree 3, altitude up to 2,000 (6,562-ft.) *According to the requirements regarding the regulations for open-circuit voltage in EN 61557-5				
Power supply	LR6 Alkaline battery × 4				
Possible number of measurements on new batteries	400 times (measurement conditions: three-electrode method, auxiliary earthing electrode resistance 100 Ω, measure 10 Ω with the range of 20Ω at 10-second intervals)				
Dustproof and waterproof	IP65/IP67 (EN60529)				
Drop-proof	1 m above concrete (with protector attached)				
Maximum rated voltage to earth	100 V AC/DC (measurement category IV), 150V AC/DC (measurement category III), 300V AC/DC (measurement category II) anticipated transient overvoltage 2500V				
Withstand voltage	3510 V, 50/60 Hz, between measurement terminals (together) and case, for 15 seconds, sensed current: 1mA				
Applicable standards	Safety: EN 61010 (main unit), EN 61010 (measuring circuit)		EMC: EN 61326	Earth tester: EN 61557	
Dimensions	Approx. 185 W × 111H × 44D mm (7.28" W × 4.37" H × 1.73" D) (including protector, excluding terminal covers)				
Mass	Approx. 570 g(20.1 oz.) (including batteries and protector, excluding other accessories)				
Accessories	Auxiliary Earthing Rod L9840 (2 piece set) ×1, Measurement Cable (alligator clip, black 4m) L9841×1, Measurement Cable (yellow 10m, equipped with winder) L9842-11×1, Measurement Cable (red 20m, equipped with winder) L9842-22×1, Carrying Case ×1, Protector×1, LR6 Alkaline battery ×4, Instruction manual×1				