# ΗΙΟΚΙ

## ANALOG EARTH TESTER FT3151

## Rewind with Ease

Three-electrode measurement Two-electrode measurement (Simple Measurement)



## Dramatically faster set-up and break-down

### Thin for a reason

Since variations in the thickness of auxiliary grounding rods cause almost no change in their grounding resistance, the FT3151 uses thinner rods that are easier to drive into the ground.

After



Prep

Thick rods had to be hammered into the ground and were difficult to remove. The FT3151 uses hard, rustresistant rods made of stainless steel.



Tangle- and twist-free measurement cord winders



### **Ensuring safe, reliable measurement**

## ~ V Ground potential check Read from the scale

Easily check for ground potential.Distorted ground potential can result in measurement errors, so it's important to eliminate any impact, for example by turning off electrical devices.



When measuring an installation with low grounding resistance, inadequate measurement sensitivity can interfere with measurement. The FT3151 lets you check the auxiliary grounding electrode S (P), too





#### Switch measurement frequencies.



\*1 According to the requirements regarding the limits for open-circuit voltage in EN 61557-5

This will make the instrument less susceptible to the effects of harmonic ground potential and other conditions.

### Specifications

(Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year)

Measurement system	Two-electrode method/three-electrode method (switchable), AC potentiometer method			
Grounding resistance	Range	Display range	Nominal Deviation	Measuring frequency: 575 Hz/600 Hz, Nominal Deviation: ±10 %
measurement	10 Ω	0 to 11.5 Ω	±0.25 Ω	Measurement current: Three-electrode method: 15 mA rms or less
(Measurement range)	100 Ω	0 to 115 Ω	±2.5 Ω	Two-electrode method: 3 mA rms or less
	1000 Ω	0 to 1150 Ω	$\pm 25 \ \Omega$	Open circuit voltage: AC50 V rms or less
Earth potential measurement	0 to 30 V, Nominal Deviation: ±3.0 % f.s.			
Operating temperature and humidity	0°C to 40°C (32°F to 104°F), 80 % rh or less (non-condensing)			
Storage temperature and	-10°C to 50°C (14°F to 122°F), 80 % rh or less (non-condensing)			
humidity				
Operating environment	Indoor, outdoor (excluding farmland*1) pollution degree 2, altitude up to 2000m (6,562-ft.)			
Power supply	LR6 Alkaline battery × 6			
Number of uses	Approx 1100 operations (using LR6 battery), Measurement conditions: 30 sec. measurement/30 sec. rest, 3-electrode method, 575 Hz, auxiliary grounding electrode resistance of 100 $\Omega$ , measuring 10 $\Omega$ in the instrument's ×1 $\Omega$ range			
Maximum rated voltage to earth	300 V AC (measurement category II) anticipated transient overvoltage 2500 V			
Overload protection	250 V AC, 1 minute (between E - S (P), E - H (C) terminals)			
Applicable standards	Safety (instrument/measurement circuitry): EN 61010, EMC: EN 61326, Grounding resistance meter: EN 61557			
Dimensions and mass	164 (W) × 119 (H) × 88 (D) mm (6.46" W × 4.69" H × 3.46" D)(not including protrusions), 760 g (26.8 oz.)(main unit only)			
Accessories	Auxiliary Earthing Rod L9840 (2 piece set) ×1, Measurement Cable (alligator clip, black 4 m) L9841×1, Measurement Cable (yellow 10 m, equipped with winder) L9842-11×1, Measurement Cable (red 20 m, equipped with winder) L9842-22×1, Carrying Case ×1, Protector×1, LR6 Alkaline battery ×6, Instruction manual×1			

Model ANALOG EARTH TESTER Order Code: FT3151

Accessories

AUXILIARY EARTHING ROD MEASUREMENT CABLE MEASUREMENT CABLE MEASUREMENT CABLE CARRYING CASE L9840 L9842-11 L9842-22 C0106 L9841 2 piece set, Yellow 10 m (32.81 ft) Red 20 m (65.62 ft) Alligator clip stainless steel. length, equipped length, equipped 270 mm (10.63 in) length black 4 m (13.12 ft) length with winder with winder Options MEASUREMENT CABLE MEASUREMENT CABLE MEASUREMENT CABLE TEST LEAD EARTH NETS SHOULDER STRAP L9843-51 L9843-52 L9787 9050 Z5022 19844 For earthing terminal board, red/yel- For simplified measurement method, Red 50 m (164.06 ft) length, 2 sheets in set Yellow 50 m (164.06 ft) length. equipped with flat cable winder low/black 1.2 m (3.94 ft) each indoor use only, red and black 1.2 m equipped with flat cable winder length (3.94 ft) each length Note: Company names and product names appearing in this brochure are trademarks or registered trademarks of various companies.



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#### HEADQUARTERS

81 Koizumi. Ueda, Nagano 386-1192 Japan https://www.hioki.com/



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