TEST & MEASUREMENT INSTRUMENTS — DATASHEET

ET510 / ET511 / ET512 / ET513

ET51 Series DC Low Resistance Tester



OVERVIEW

The ET51 series DC low resistance testers measure DC medium and low-value resistances of all kinds: transformer and other winding resistances, relay contact resistance, cable conductor resistance, bonding resistance between metal parts, fuses, conductive rubber and similar parts. A large LCD reads clearly; ranges run from 20 mΩ to 20 kΩ (2 MΩ optional) with seven ranges (nine optional), the range span adjustable. Built-in sorting with sorting-result output suits production-line testing, and the instruments support interface communication and control — RS232 and Handler interfaces are standard, for communication with a PC, PLC or other host.

FEATURES

- Maximum resistance range up to 2 MΩ
- Highest resolution 10 μΩ
- 5-inch LCD with backlight display
- Sorting comparison with alarm function
- Manual range lock and auto ranging
- Two display modes: direct reading and percentage
- Short-circuit correction (zeroing) function
- Internal, manual and external trigger
- Interfaces standard: RS232 and Handler communication, supporting the SCPI programming protocol

SPECIFICATIONS

Item	ET510	ET511	ET512	ET513
Test range	10 μΩ–5 kΩ	10 μΩ–20 kΩ	10 μΩ–200 kΩ	10 μΩ–2 MΩ
Basic accuracy	0.1 % + 3 digits			
Minimum resolution	10 μΩ			

Item	ET510	ET511	ET512	ET513
Max. test current	100 mA			
Display modes	Direct reading / percentage			
Test speed	Slow: 8 readings/s · fast: 15 readings/s			
Dedicated function	Sorting and comparator alarm			
Trigger modes	Internal, manual, external			
Open-circuit voltage	< 5 V			
Range mode	Auto / lock			
Interfaces (standard)	RS232, Handler			

RESISTANCE RANGES

Range	20 mΩ	200 mΩ	2 Ω	20 Ω	200 Ω	2 kΩ	5 kΩ	20 kΩ	200 kΩ	2 MΩ
Test current	100 mA	100 mA	10 mA	1 mA	100 µA	100 µA	100 µA	100 mA	10 µA	1 µA
Resolution	10 µΩ	10 µΩ	100 µΩ	1 mΩ	10 mΩ	100 mΩ	1 Ω	1 Ω	10 Ω	100 Ω

GENERAL SPECIFICATIONS

Power supply	100–240 V AC, 45–65 Hz
Display	5-inch LCD
Working environment	Temperature 5 ℃ to 40 ℃ · humidity < 80 % RH
Interfaces	RS232, Handler (standard)
Dimensions	230 mm × 30 mm × 122 mm

Specifications are as published in the ET51 series technical data sheet. Instruments are quoted per enquiry — contact with your resistance range for pricing and availability.