

DC Resistance Meter

SME1415



Features

- Maximum accuracy: 0.01%
- Temperature accuracy: 0.1°C
- Minimum resolution: 0.1 $\mu\Omega$ (resistance)
- Low-resistance test mode can effectively protect DUT
- Multiple measurement combinations of R, LPR, T
- Temperature compensation (TC)
- Temperature conversion (Δt)
- Maximum sample rate : 100samps/sec
- Offset voltage compensation (OVC)
- Zero adjustment
- Simultaneous comparison of output results of 10 bins
- Statistics function: CpK, Cp
- 30 groups of parameter files can be saved and loaded
- Data save function to save measurement results
- Automatic update of operation software through USB HOST
- Intelligent detection for test state error
- Flexible and convenient file operation system
- Handler interface
- Interface RS232, USB Host, USB Device and LAN and GPIB (Optional)

Technical specifications		SME1415			
Display digits	5 ½ digits				
Resistance measurement					
Measurement range	0.1 $\mu\Omega$ to -110M Ω				
Resistance range	Current	Resolution	Accuracy (Rd% + FS%)		
20m Ω	1A	0.1 $\mu\Omega$	0.10 + 0.025		
200m Ω		1 $\mu\Omega$	0.05 + 0.030		
2 Ω	100mA	10 $\mu\Omega$	0.03 + 0.010		
20 Ω		100 $\mu\Omega$	0.02 + 0.008		
200 Ω		1m Ω	0.01 + 0.002		
2k Ω	1mA	10m Ω	0.01 + 0.002		
20k Ω	100 μ A	100m Ω	0.01 + 0.002		
100k Ω		1 Ω	0.01 + 0.005		
1M	10 μ A	10 Ω	0.02 + 0.005		
10M Ω	1 μ A	100 Ω	0.05 + 0.010		
100M Ω	100nA	1k Ω	0.40 + 0.040		

Technical specifications		SME1415
Measurement function		
Resistance measurement time		FAST : 7ms, MED:22ms, SLOW 1 : 102ms, SLOW 2 : 402ms Above data is correct when DISPLAY is off, when DISPLAY is on, 20ms should be added
Temperature measurement time		100 ± 10ms
Test terminal		4 terminal
Average setup		1 – 255
Zero clearing		Available
Range		Auto and Manual
Trigger mode		Internal, Manual, External, BUS
Power Frequency Selection		avoid the interface of the power noise
Setting data storage		30 groups
Low voltage measurement		Open voltage ≤ 60mV, Effective range : 2Ω, 20Ω, 200Ω, 2kΩ
Thermal electromotive force elimination		Available
Statistics function		AVG, MAX, MIN, OSD (Overall standard deviation), SSD (Sample standard deviation), Process capacity index (Cp, cpk)
Measurement error detection		Detect the measurement cable has been connected correctly or not
Key lock		Available
Temperature measurement		
Temperature measurement 1		-10.0 °C to 99.9 °C Sensor : PT500
Temperature measurement 2		Analog input : 0V to 2V Display : -99.9 °C to 999.9 °C
Temperature compensation		Convert the resistance measurement value to that one measured under preset temperature
Temperature switch		Temperature rising is gained from resistance test values before and after warming
Compare Judge		
Comparator	Signal output	HI / IN / LO
	Beep	Beep mode : OFF, IN, HI / LO
	Limit setup mode	Absolute value high/ low limit, percentage high/low limit + nominal value
Sorting		10 bins, absolute value / percentage
External trigger delay time		AUTO: dependent on range, low voltage mode ON/OFF, OVC (offset voltage compensation) ON/OFF Manual : 0.000 to 9.999s
External input trigger		Rising / Falling edge
Interface		Standard : USB DEVICE, USB HOST, RS232C, Handler
		Optional : GPIB Cable
General specification		
Display		24 bit 400 x 272 and touch TFT LCD Screen
Input Supply		230V ± 10%, 50/60Hz
Consumption		30VA
Operating condition		0°C to 40°C, ≤ 80%RH
Storage condition		-10°C to 50°C, ≤ 90%RH
Dimensions		W : 215 x H : 177 x D : 570 mm
Weight		Approx 3.6 kg.
Accessories		Mains cord, 4 Terminal Test Cable (SMA26050S), Temperature Sensor (PT500), CD, Interface cable

Subject to change



SMA26050S



PT500



CD



USB Cable



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