

Microohmmeter and Bond Tester



Model R1L-BI



Model R1L-BIR

- Rugged: MIL PRF2880F Class 3 (R1L-BIR)
- Low Cost: (R1L-BI)
- Portable: Long Rechargeable Battery Life
- Ranges: 2 mΩ to 20 Ω
- Accuracy: 0.25% of reading
- Resolution: 1 μΩ
- Simple Operation
- Offset Compensation

The R1L-BI series Ohmmeter/Bonding Tester is a digital microohmmeter designed to measure resistances up to 20 Ω. It may be used in applications such as ground bond tests, motor, transformers, switch, circuit breaker, circuit resistance and other contact and connection resistance tests. The instruments utilize the four-terminal Kelvin technique to eliminate errors caused by the resistance of the connecting cables. Resistance readings are viewed on a 3½ digit display, reading from 1.999 to 199.9.

Front panel controls are simply a POWER ON-OFF switch and a rotary 5 range selector switch. Measurement connections are made via four front panel low thermal banana jacks.

Both instruments are battery operated and recharged from line power. The BIR model is more suitable for portable "rugged" applications while the BI model is suitable mainly for "in plant" environments.

Specifications

Resistance Ranges and Test Currents

Full Scale	Resolution	Accuracy	Test Current
1.999 mΩ	1 μΩ	0.25% of reading ± 1 count	1.4 A
19.99 mΩ	10 μΩ	0.25% of reading ± 1 count	140 mA
199.9 mΩ	100 μΩ	0.25% of reading ± 1 count	14 mA
1.999 Ω	1 mΩ	0.25% of reading ± 1 count	1.4 mA
19.99 Ω	10 mΩ	0.25% of reading ± 1 count	140 μA

Reactive loads not to exceed 2mH or 100μF with a minimum of 5μΩ per μH of series resistance.

Calibration Operates as specified for at least one year without the need for recalibration. Internal controls are available to recalibrate all ranges.

Environmental Operating Temperature: 0 to +50 ° C Storage Temperature: -40 to +71° C

Physical and Power	R1L-BI	R1L-BIR
	Size: 11.6"W X 4"H X 6.8"D	Size: 10"W X 5"H X 9"D
	Weight: 3.6 lb	Weight: 6.7 lb
		Power: 120/240VAC 50/60 Hz 3 High Capacity 'C' NiCad rechargeable batteries included

Accessories

- HTP-100** Pistol Grip Probes
- KTL-100** Kelvin Clip Leads
- KAK-1M** Kelvin Alligator Clips
- HKC-100** Large Kelvin Test Lead Set
- BKP-10** Standard Kelvin Probe
- MKP-6** Kelvin Probe
- MCP-6** Miniature Kelvin Coaxial Probe

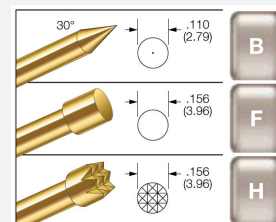
View [Accessory Datasheet](#)



BKP-10 HTP-100 Pistol Grip KTL-100



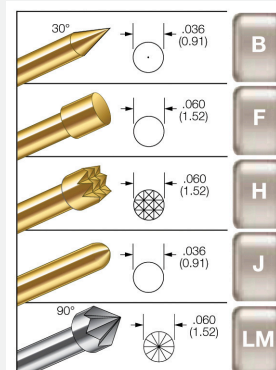
BKP-10 Probe Set with "B" Style Pins Installed



BKP-10 Pin Options



MKP-6 Probe Set with "B" Style Pins Installed



MKP-10 Pin Options