

The R1L-BIR1 is specifically configured for flight-line testing of military helicopters.



R1L-BIR1

**The Model R1L-BIR1 Bond Testing Kit** is the latest addition to TEGAM's growing line of high-performance micro-ohmmeters.

This self-contained, portable instrument provides all the features and capabilities needed to complete any ground bond test in even the most difficult environments. It was designed to make the more than thirty bond measurements required in the Kiowa Warrior Maintenance Procedure.

**The R1L-BIR1:**

- Field proven design
- Four wire Kelvin measurement for 0.25% accuracy
- Five Ranges: 2 mΩ to 20 Ω.
- Rechargeable batteries with a full day of use

The R1L-BIR1 is designed to be used by all maintenance personnel without training. The permanent front panel diagrams and instructions ensure that any user will be able to plug-in their choice of probe, turn it ON, select a RANGE and make an accurate measurement without consulting the user manual.

The R1L-BIR1 was designed to be the ideal solution for bond testing rotary wing aircraft in manufacturing and flight line maintenance operations.

## Bond Testing Kit

- 1 Pair of BCP-10 Kelvin Probes
- 1 Pair of KAK-1M Kelvin Alligator Klips
- 8 BCP-10-A Probe Tips
- 1 Power Cord for line power and recharging
- 1 User Manual with operating and service instructions
- 1 ANSI/ Z540-1 Compliant Calibration Certificate
- 1 Spare Fuse installed in integral spare fuse holder

## 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

\*Note: For readings below 10% of each range, accuracy is ±(0.25% + 2 counts)

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

<b>Recommended Calibration Cycle</b>	1 year
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Environmental	
<b>Operating Temperature</b>	0 °C to +50 °C
<b>Storage Temperature</b>	-40 °C to +71 °C

Physical and Power	
<b>Size</b>	14.1 in W x 10.6 in D x 6.1 in H
<b>Weight</b>	9.8 lb (4.45 kg)
<b>Power</b>	90 to 250 VAC 50/60 Hz

3 High Capacity 'C' NiCad rechargeable batteries are included

\*Accuracy based on recommended calibration cycle.

## Additional Accessories Available for Aerospace Applications

Model	Description
<b>HTP-100</b>	Pistol Grip Probes
<b>SSP-10</b>	Kelvin Probe with Stainless Steel Pins
<b>SSP-10-A</b>	Replacement Pins for SSP-10
<b>HKC-100</b>	Large Kelvin Test Lead Set



**HKC-100 Large Kelvin Test Lead Set**



**SSP-10 Kelvin Probe with Stainless Steel Pins**



**HTP-100 Pistol Grip Probes**



Shown above, the included KAK-1M Kelvin Alligator Klips, and the BCP-10 Kelvin Probes with BCP-10-A tips.