

# TEGAM MODEL 710A

HANDHELD BOND METER



Advanced Energy's TEGAM 700A series bond meters are the only highly-portable bond meter assembled in the U.S.A. that offer superior accuracy, 100–hour battery life, and a 3–year warranty.

#### **PRODUCT HIGHLIGHTS**

- Superior Accuracy ±(0.2% Reading + 0.02% Range)
- Widest Probe Selection
- Uncomplicated, Back-lit Display
- 100-Hour Battery Life (3AA)\*
- Smallest and Lightest Bond Meter
- 3-Year Warranty
- Assembled in USA
- Model 720A: Intrinsically Safe

## **TYPICAL APPLICATIONS**

- Aerospace
- Alternative Energy
- Automotive
- Electronics
- Electrical Systems

#### **AT A GLANCE**

#### **Accuracy**

±(0.2% Reading + 0.02% Range) 18 to 28 °C

## **Temperature Range**

-10 to 55 °C / 14 to 131 °F

#### **Reading Rate**

3 Readings per second

#### **Connector Type**

M12

#### **Battery**

3AA (IEC LR6, ANSI 15) Alkaline





<sup>\*</sup>Actual battery life depends on measurement range and frequency.

#### **OVERVIEW**

Trust is an essential feature in any measurement tool and Advanced Energy's TEGAM 700 Series bond meters are instruments you can rely on every day with confidence. These new models are designed with the clearest and most informative displays for mistake-free usage. They quickly produce accurate readings to reduce the time spent measuring.

TEGAM is the largest producer of bond meters for airframe testing in both military and commercial applications. We also make some of the finest low resistance measurement instruments in the world. We combined this experience into the smallest size bond meter that you can take with you anywhere on an airframe with ease. We also developed unique low power techniques so that you don't have to deal with power cords or battery chargers. The 710A/720A will run for 100 hours on 3 standard AA batteries and has auto power off to preserve them. The battery health is clearly indicated so that you have ample warning for replacement.

Probes are often more important than the instrument. No one has a wider range of configurations to meet and adapt to your needs. From tight spacing to piercing paint, we have a handle and tip combination for virtually all applications. You can mix styles to make your job easier. The dual connector system permits a Kelvin Clip on one lead for secure ground connection while the ergonomic tri-shape probe on the second lead can be used for accessing multiple points with one hand.

The creative ergonomic design makes these instruments easy to hold, easy to read and easy to clean. Designed for one-handed operation, these tools are comfortable to carry and use for extended periods of time.

Like all TEGAM products, the 700 Series bond meters are designed, assembled and tested in the United States. TEGAM backs this durable instrument with a 3-year warranty to assure you that your investment is sound.

For over 30 years, TEGAM has been building hand held instruments for challenging applications. TEGAM's 700 Series extends that experience into highly portable bond meters tasked with producing reliable measurements in tight spaces encountered with aircraft. They are designed to be durable and easy to use, with advanced features for better measurements.

#### **PRODUCT SPECIFICATIONS**

Resistance Ranges and Test Currents	Full Scale	Resolution	Test Current
	10.000 mΩ	1 μΩ	100 mA
	100.00 mΩ	10 μΩ	10 mA
	1.0000 Ω	100 μΩ	1 mA
	10.000 Ω	1 mΩ	100 μΑ
	100.00 Ω	10 mΩ	10 μΑ
Basic Accuracy*	±(0.2% Reading + 0.02% Range)		
Recommended Calibration Cycle	1 Year		
Connector Type	M12		
Display	4-Digit Auto-Ranging with Backlight and Function Annunciators		
Reading Rate	3 Readings / sec.		
Battery Type	3 AA (IEC LR6, ANSI 15) Alkaline		
Battery Life	Standby: 100 hours; Operation @ 100 mA: 50 hours		

<sup>\*</sup>Accuracy based on recommended calibration cycle.



# **PRODUCT SPECIFICATIONS**

Dimensions	193 X 84 X 28 mm (7.6 X 3.3 X 1.1 in.)	
Weight (including batteries)	303.2 g (10.7 oz.)	
Warranty	3 Years Parts & Workmanship	
Included Accessories	3 AA Batteries, Quick Start Guide, Certificate of Traceability	

Operating Environment		
Temperature	-10 to 55 °C (14 to 131 °F)	
Humidity	5 to 95%, 10 to 30 °C (5 to 95%, 50 to 86 °F)	
Altitude	0 to 4600 m (0 to 15,092 ft.)	
Vibration	Random 10 to 500 Hz, 0.03 g <sup>2</sup> /Hz	
Shock	30 g Half Sine	
Drop	4 Drops from 1 m to Concrete	

# ORDERING INFORMATION

	Handheld Bond Meter  Tilt Stand / Magnetic / Hanger (Factory Installed)	
	Tilt Stand / Magnetic / Hanger (Factory Installed)	
	Tilt Stand / Magnetic / Hanger (Factory Installed)	
	Tilt Stand / Magnetic / Hanger (User Installed)	
	Foam-Filled Hard Carry Case	
	SureGrip Cover	
5	ISO 17025 Calibration	
710A-BK-KIT	Contains: - 710A Bond Meter, BKDP-M2 Kelvin Display Probe, BKP-M2 Big Kelvin Probe.	
	Two BKP-B Pin Kits, 700-910 Tilt Stand / Magnetic / Hanger, 720-915     SureGrip Cover, 700-911 Foam-Filled Hard Carry Case.	
5		











700-911 Foam-Filled Hard Carry Case

720-915 SureGrip Cover

0.730 ΟΚ mΩ

700-910 or 700-912 Tilt Stand / Magnetic / Hanger

## **ORDERING INFORMATION**

#### **Probes**

Choose two of the following probes to make a probe set, and choose one or two tip types. Any combination is valid, but only one display probe can be used in a set (display probe must be connected to channel one).

BKP Standard Kelvin Probe

BKDP Standard Kelvin Display Probe

BKEP Big Kelvin Extended Probe, 700 Series

MKP Miniature Kelvin Probe

MKDP Miniature Kelvin Display Probe MCP Miniature Kelvin Coaxial Probe

MCDP Miniature Kelvin Coaxial Display Probe

KC Kelvin Clip Leads



**BKDP Standard Kelvin Display Probe** 

# BKP Probe with "B" Style Pins Installed





0.19" (4.8 mm) Pin Spacing

# **BKP Pin Options**



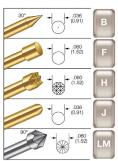
# MKP Probe with "B" Style Pins Installed





0.11" (2.8 mm) Pin Spacing

# **MKP Pin Options**



**MCP Probe** 





KC Kelvin Clip Leads





# **ORDERING INFORMATION**

Probes Type	Part Number	Description
Standard Kelvin	BKDP-M2	Big Kelvin Display Probe, 700 Series
	BKP-M2	Big Kelvin Probe, 700 Series
	BKEP-M2	Big Kelvin Extended Probe, 700 Series
Coaxial	MCDP-M2	Miniature Coaxial Display Probe, 700 Series
	MCP-M2	Miniature Coaxial Probe, 700 Series
Miniature Kelvin	MKDP-M2	Miniature Kelvin Display Probe, 700 Series
	MKP-M2	Miniature Kelvin Probe, 700 Series
Kelvin Clip	KC-M2	Kelvin Clip, 700 Series, 2m
	KC-M5	Kelvin Clip, 700 Series, 5m





Advanced Energy (AE) has devoted more than four decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE | TRUST

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