

# TEGAM

## MODEL 720A

HANDHELD BOND METER



Advanced Energy's TEGAM 720A series bond meters are the only highly-portable, intrinsically safe bond meter assembled in the U.S.A. that offer superior accuracy, 100-hour battery life, and a 3-year warranty.

### PRODUCT HIGHLIGHTS

- Intrinsically Safe
- Superior Accuracy  $\pm(0.2\% \text{ Reading} + 0.02\% \text{ Range})$
- Widest Probe Selection
- Uncomplicated, Back-lit Display
- 100-Hour Battery Life (3AA)\*
- Smallest and Lightest Bond Meter
- 3-Year Warranty
- Assembled in USA

\*Actual battery life depends on measurement range and frequency.

### TYPICAL APPLICATIONS

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

### AT A GLANCE

#### Accuracy

$\pm(0.2\% \text{ Reading} + 0.02\% \text{ Range})$

#### 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



### OVERVIEW

Trust is an essential feature in any measurement tool and Advanced Energy's TEGAM new 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.

When the Measurement Matters, Be Certain with TEGAM.

## PRODUCT SPECIFICATIONS

Product Specification			
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 μA
	100.00 Ω	10 mΩ	10 μA
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		
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		
Certifications	<p>Handheld Bond Meter for Hazardous Locations Only as to Intrinsic Safety</p> <div>  0539  IIIG </div> <div>  </div> <div> <p>Ex ia IIA T4 Ga Class I, Division 1, Group D, T4 Class I, Zone 0 AEx ia IIA T4 Ga Zone 0 Ex ia IIA T4 Ga</p> <p>UL 21 ATEX 2549 IECEX UL 21.0038 -10 °C ≤ Ta ≤ +55 °C</p> </div>		

\*Accuracy based on recommended calibration cycle.

Environment Specification	
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

## MODEL 720A

### ORDERING INFORMATION

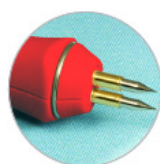
Item	Part Number	Description
Intrinsically Safe Bond Meter	720A	Handheld Bond Meter, Intrinsically Safe

### Intrinsically Safe Probes

Choose two of the following probes to make a probe set, and choose one or two tip types.

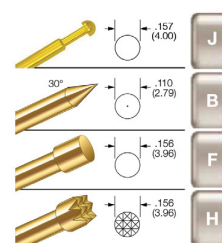
BKP	Standard Kelvin Probe
BKEP	Big Kelvin Extended Probe, 700 Series
MKP	Miniature Kelvin Probe
MCP	Miniature Kelvin Coaxial Probe
MCP	Miniature Kelvin Coaxial Probe
KC	Kelvin Clip Leads

### BKP-M2S Probe with “B” Style Pins Installed

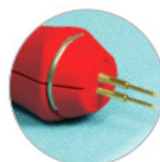


0.19"  
(4.8 mm)  
Pin Spacing

### BKP Pin Options

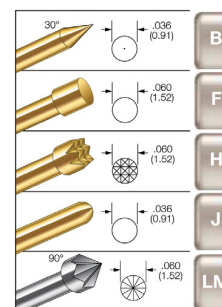


### MKP-M2S Probe with “B” Style Pins Installed



0.11"  
(2.8 mm)  
Pin Spacing

### MKP Pin Options



### MCP-M2S Probe



### BKEP-M2S Big Kelvin Extended Probe 700 Series



### KC Kelvin Clip Leads



## ORDERING INFORMATION

Item	Part Number	Description
Standard Kelvin	BKP-M2S	Big Kelvin Probe, 700 Series
	BKEP-M2S	Big Kelvin Extended Probe, 700 Series
Coaxial	MCP-M2S	Miniature Coaxial Probe, 700 Series
Miniature Kelvin	MKP-M2S	Miniature Kelvin Probe, 700 Series
Kelvin Clip	KC-M2	Kelvin Clip, 700 Series, 2m
	KC-M5	Kelvin Clip, 700 Series, 5m
720A Kit	720A-BK-KIT	Contains: 720A Bond Meter, (2) BKP-M2S Intrinsically Safe Probes with (2) BKP-B Style Pin Sets, 720-910 Tilt Stand / Magnet / Hanger, 720-915 SureGrip Cover, 720-911 Spark-Proof Foam-Filled Hard Carry Case
Optional Calibration	OPT-700-17025	ISO 17025 Calibration





For international contact information,  
visit [advancedenergy.com](https://advancedenergy.com).

[powersales@aei.com](mailto:powersales@aei.com) (Sales Support)  
[productsupport.ep@aei.com](mailto:productsupport.ep@aei.com) (Technical Support)  
+1 888 412 7832

## ABOUT ADVANCED ENERGY

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

---

Specifications are subject to change without notice. Not responsible for errors or omissions. ©2024 Advanced Energy Industries, Inc. All rights reserved. Advanced Energy®, and AE® are U.S. trademarks of Advanced Energy Industries, Inc.