



## 1330A AUTOMATED ARTIFACT CALIBRATOR

Three Standards – One Box



### Featuring

- ▶ Fully Automated Artifact Calibration of Calibrators and DMMs from a Single Instrument
- ▶ Three Standards – One Box

### Overview

Measurements International's recently launched Automated Artifact Calibrator (1330A) is a highly versatile, accurate instrument that meets laboratory requirements for automated artifact calibration (to assign values to internally generated parameters) on calibrators and DMMs.

This process is typically performed using a small number of standards at recommended calibration intervals indicated in the calibrator or DMM manufacturers manual. The 1330A is composed of a temperature-controlled instrument enclosure, three reference standards, and a battery backup. Power supply is external (part of the power cable).

Feature	Benefit
Primary 1 Ω, 10 kΩ and 10 V references.	All standards provided in one temperature-controlled enclosure.
Clear connection for JVolt Comparison of 10 V Zener.	Providing highest level traceability.
Manual (push buttons on front panel) or automated control (select by GPIB interface).	Ability to select appropriate standard (choice of 3) for calibration.
Output connections to calibrator or DMM on front panel.	Choice of cables available (and supplied) feature direct plug-in for 57XX series calibrators or to the 3458A DMM.
Current standard value is extrapolated from prior calibrations.	Enhanced automation and improved accuracy.
Oven temperature monitored by internal PRT.	Provides better performance of artifacts as temperature environment is stable and controlled to less than 100 m°C.
Calibrated values of the standards entered in the unit.	No requirement for set-up.
Front panel display showing certification value.	Quick access and reference to information.



## 1330A AUTOMATED ARTIFACT CALIBRATOR

### Specifications: Rev 3

Artifact Standard	TC <sup>(1)</sup>	Stability per Year	Dissipation
10 V	0.1 $\mu\text{V}/\text{V}/^\circ\text{C}$	30 Days: 0.25 $\mu\text{V}/\text{V}$ 90 Days: 0.75 $\mu\text{V}/\text{V}$ 1 Year: 1.5 $\mu\text{V}/\text{V}$	
1 $\Omega$	0.1 $\mu\Omega/\Omega/^\circ\text{C}$	1 Year: 0.5 $\mu\Omega/\Omega$	10 mW
10 k $\Omega$	0.1 $\mu\Omega/\Omega/^\circ\text{C}$	1 Year: 0.5 $\mu\Omega/\Omega$	10 mW
<b>Temperature Stability</b>		$\pm 0.1^\circ\text{C}$ Over a 1 Year Period	
<b>Ambient Temperature Range</b>		23 $^\circ\text{C} \pm 5^\circ\text{C}$	
<b>Ambient Humidity Range</b>		20 to 90 % Non-condensing	
<b>Storage (with Battery Removed)</b>		-50 $^\circ\text{C}$ to +50 $^\circ\text{C}$	
<b>Isolation to Earth</b>		$> 10^{12} \Omega$	
<b>Direct Cable to 57XX</b>		Provided	
<b>Power</b>		24-hour Internal Battery <sup>(2)</sup>	
<b>Warranty</b>		Standard 2 Year Parts & Labour	

<sup>1</sup> Temperature Coefficient: 0.2 ppm/ $^\circ\text{C}$  for ambient temperatures outside  $\pm 5^\circ\text{C}$

<sup>2</sup> Optional (72-hour) battery pack (Model 1330A-PS) contained in own enclosure, plugs into rear of 1330A

#### Options:

PN: 1330-0 Output cable to bare ends

PN: 1330-C Output cable to custom

PN: 1330-PS Battery pack (72-hour) contained in own enclosure, plugs into rear of 1330A

**Other:** Contact MI

**Shipping:** Shipped cold in reusable container; 12 hours of warm-up required to reach operating temperature

#### Dimensions (L x W x H):

225 x 305 x 150 (mm)

#### Weight:

10 kg

#### Shipping Weight:

15 kg

#### Main Power:

85 to 264 V – 47 to 440 Hz

#### Corporate Headquarters

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