

## 3000 SERIES 3A POWER SUPPLY CALIBRATION ADAPTER EA3023 (for 3041/3010)



An essential option for simplifying calibration of power supplies. The PSU adapter can measure the output voltage and also provides a precision electronic current load allowing volts, current and even output resistance to be calibrated by one compact unit. 4 wire connection ensures accuracy and repeatability.

### MEASURING PSU OUTPUT VOLTAGE

The adapter measures the power supply's output voltage using the internal high accuracy A/D converter built into the 3000 Series.

### CALIBRATING PSU CURRENT METER

The adapter provides a precision electronic load controlled by the calibrator. To calibrate the power supply output current meter, simply set the required load current and record the meter reading.

### DETERMINING PSU OUTPUT RESISTANCE/VOLTAGE DROP

By measuring a power supply's on load / off load voltages, the output resistance of the PSU can easily be measured.

The operation is controlled using a PC running either the Virtual front panel program (supplied) or ProCal software. ProCal procedure wizard available for automatic procedure generation.

### SPECIFICATIONS

Voltage Measurement Resolution	0 to 63V 10mV
Best 1 Year Accuracy	±0.02% of Setting
Current Load Range	0 to 3A
Best 1 Year Accuracy	± 0.05% of Setting
Notes	Virtual Front Panel (supplied) or ProCal Control

See extended specifications for full details

- ▶ Measure Output voltage to 63 Volts
- ▶ Active Current load to 3 Amps
- ▶ Measures output Resistance
- ▶ Connects to Adapter Interface on calibrator
- ▶ Used with virtual front panel or ProCal Software

## 3000 SERIES 60A POWER SUPPLY CALIBRATION ADAPTER EA3025 (for 3041/3010)



Extending on the capabilities of the EA3023, the EA3025 provides an easy to use solution for the calibration of high current power supplies. This adapter overcomes many of the problems associated with measuring higher output currents required.

Traditional techniques of using high current low value load resistors and current shunts can result in unstable/inaccurate readings even with small voltage fluctuations from the power supply or variations in connection and lead resistance. The manual nature of this method of calibration is both time consuming and prone to accidental damage of the load resistor and measurement equipment.

The three advantages of using the EA3025 are :

1. Provides an accurate, stable electronic current load regardless of the power supply output voltage and lead/ connection resistances
2. Removes the need for high power load resistors of appropriate values
3. Allows automation for more efficient calibration

### SPECIFICATIONS

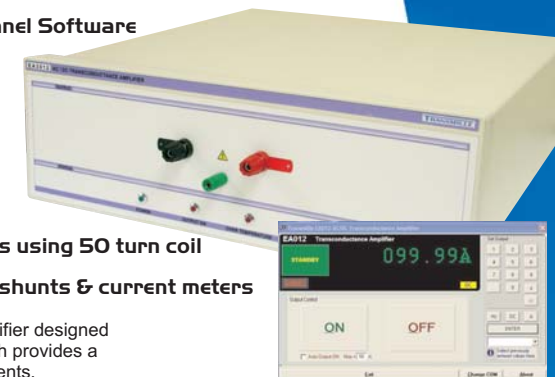
Voltage Measurement Resolution	0 to 100V 10mV
Best 1 Year Accuracy	±0.02% of Setting
Current Load Range	0 to 60A
Best 1 Year Accuracy	± 0.05% of Setting
Notes	Virtual Front Panel (supplied) or ProCal Control

See extended specifications for full details

- ▶ Measure Output voltage to 100 Volts
- ▶ Active Current load to 60 Amps
- ▶ Measures output Resistance
- ▶ Applications include Battery & UPS testing
- ▶ Connects to Adapter Interface on calibrator
- ▶ Used with virtual front panel or ProCal Software

## 3000 SERIES AC / DC TRANSCONDUCTANCE AMPLIFIER EA3012 (for 3041/3010)

- ▶ Controlled by ProCal or Virtual Front Panel Software
- ▶ Stackable for higher currents
- ▶ 0.08% + 10mA Accuracy
- ▶ Low noise linear MOSFET technology
- ▶ Up to 100A DC • 75A AC Output
- ▶ Calibration of up to 2000A clamp meters using 50 turn coil
- ▶ Ideal for calibrating high power current shunts & current meters



The EA3012 is a powerful linear transconductance amplifier designed exclusively for use with the 3000 Series calibrators which provides a cost effective solution to calibrating high current instruments. Connecting to the 3000 Series calibrator using the feature connector, the EA3012 extends the output current range to 100A DC / 75A AC - higher currents are available by paralleling EA3012 amplifiers as required to give the current output needed.

Use of linear technology throughout gives a very low noise output completely free from switching spikes. The latest in high power MOSFET design ensures reliable and stable operation even into inductive loads. Long term accuracy is assured by using precision foil resistors and a custom manufactured internal shunt.

### SPECIFICATIONS

AC Output	70A Maximum
DC Output	100A Maximum
AC/DC Accuracy	0.08% + 10mA
Compliance Voltage	6V Pk-Pk
Frequency	DC to 400Hz
Power Consumption	1kW
Cooling	Internal Fan

See extended specifications for full details

## 3000 SERIES AC / DC KILOVOLT AMPLIFIER EA3024 (for 3041/3010)

The EA3024 kilovolt amplifier provides the solution to the calibration of high voltage probes and dividers. The amplifier/calibrator combination is used with Virtual Front Panel (supplied) or ProCal software.

- ▶ DC Output 1 to 10 kVolts
- ▶ AC Voltage 1 to 5 kVolts
- ▶ Controlled by ProCal or Virtual Front Panel Software



Connect for DC or AC output is via independent sockets, with each socket having an individual LED indicator. The ground connection is a 4mm terminal post.



### SPECIFICATIONS

AC Output	5kV Maximum
DC Output	10kV Maximum
AC/DC Accuracy	0.5%
Output Current	100uA
Frequency	DC / 40 to 60Hz

See extended specifications for full details