

# 15 Volt DC Power Supply

ACCESSORIES  
Model 1945



**INCON**<sup>®</sup>  
INTELLIGENT CONTROLS

The Model 1945 is a 15 Volt DC, regulated Power Supply. The Model 1945 is only used with INCON Panel Meters that were ordered with the 4 to 20 milliamp analog output option.

## Features

- VDE transformer construction - Full rated to 50 °C
- + 0.05% regulation - Foldback/current limit
- T.C. burned-in to MIL - 883 Lev. B
- UL recognized/CSA certified
- Chassis notched for AC input
- Over Voltage Protection on 15V output
- 100/120/220/230-240 VAC power
- Industry standard size

## Safety Specifications

The 1945 power supply is designed to meet or exceed requirements of the following specifications: IEC 380, IEC 435, VDE 0730 Part 2, VDE 0804, ECMA-57, CEE 10 Part 2P, UL 1012, CSA 22.2 No. 143, CSA 22.2 No. 154. Specifically, field terminal to terminal spacing is 5.25 mm with 9.0 mm creepage to other metal. Leakage current is less than 5.0 mA and dielectric withstanding voltages are 3750 VAC input to chassis. 3750 VAC input to output and 300 VDC output to chassis.

## Cooling

Convection cooling is adequate where non-restricted airflow is available. When operating in a confined area, moving air or conduction cooling is recommended.

## MI/RFI

The 1945 power supply has inherently low conducted and radiated noise levels for most system applications that meet the requirements of FCC Docket 20780 for Class A equipment and VDE 0871 for Class A equipment without additional noise filtering.

## AC Connections & Fusing

The five-wire input to the 1945 provides four voltage ranges: 100/120/220/230-240. See chassis AC connection table (Figure 1) for the jumpering requirements. Extended low line tolerance provides additional drop out margin in areas where line voltages are marginal. Inputs must be fused.

## Notes:

- This product is a Class 1 power supply and requires the chassis to be connected to earth ground at end application.
- Use 700 °C iron for soldering input connections.
- Specifications subject to change without notice.

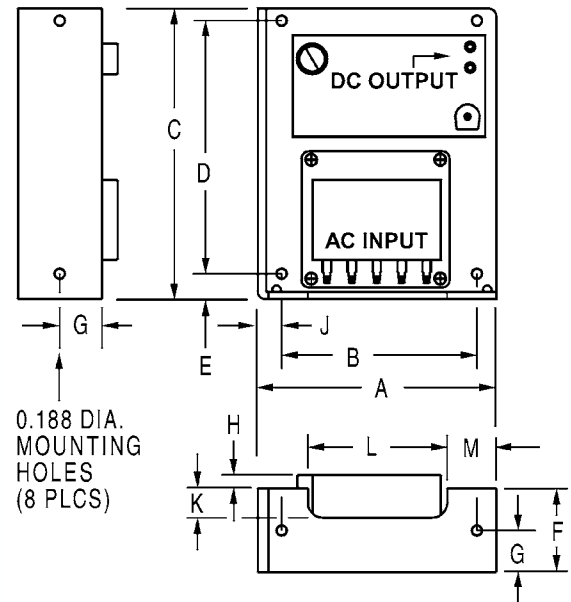
# 15 Volt DC Power Supply

**ACCESSORIES**  
**Model 1945**

## General Specifications

<b>AC Input:</b>	100/120/220/230-240 VAC, $\pm 10\%$ , 47-63Hz (Derate output current 10% for 50 Hz operation). Fuse at: 0.5 / 0.25 amps for 100 -120 / 220 - 240 VAC. See Figure 1 – AC Input connection table, for jumpers required
<b>DC Output:</b>	12 - 15V ( $\pm 5\%$ ) Adjustable
<b>Line Regulation:</b>	$\pm 0.05\%$ for a 10% line change
<b>Load Regulation:</b>	$\pm 0.05\%$ for a 50% load change
<b>Output Ripple:</b>	5.0 mV PK-PK maximum
<b>Transient Response:</b>	$\leq 50\mu\text{s}$ for a 50 to 100 % load change
<b>Short Circuit And Overload Protection:</b>	Automatic current limit / foldback
<b>Over Voltage Protection:</b>	Not Available
<b>Remote Sensing:</b>	Not Available
<b>Stability:</b>	$\pm 0.3\%$ for 24 hour period after 1 hour warm-up
<b>Temperature Rating:</b>	0 °C to 50 °C full-rated derated linearly to 40% at 70 °C
<b>Temperature Coefficient:</b>	$\pm 0.03\%/^{\circ}\text{C}$ maximum
<b>Efficiency:</b>	55%
<b>Vibration:</b>	Per ML-STD-8100 method 514.3 category 1 procedure I
<b>Shock:</b>	Per ML-STD-8100 method 516.3 procedure III
<b>Weight:</b>	2 lbs (1 KG) [Shipping: 3 lbs (1.5 Kg)]

## Dimensions



	INCHES	mm
<b>A</b>	4.00	101.60
<b>B</b>	3.375	85.73
<b>C</b>	4.87	123.70
<b>D</b>	4.125	104.78
<b>E</b>	0.50	12.70
<b>F</b>	1.62	41.15
<b>G</b>	0.75	19.05
<b>H</b>	0.45	11.43
<b>J</b>	0.38	9.65
<b>K</b>	0.57	14.48
<b>L</b>	1.90	48.26
<b>M</b>	0.794	20.17

Figure 2.

## AC Input Wiring Connections

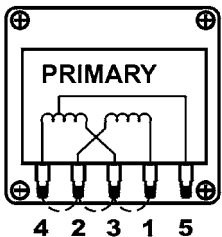


Figure 1.

AC INPUT, 47-63 HZ				
For use at	100 VAC	120 VAC	220 VAC	230/240 VAC
Jumper	1&3 2&4	1&3 2&4	2&3	2&3
Apply AC	1&5	4&1	1&5	4&1



000-0186 Rev. B 6/04

**INCON**<sup>®</sup>  
INTELLIGENT CONTROLS

PO Box 638  
92 Industrial Park Road  
Saco, Maine 04072  
Tel: 800-872-3455  
Fax: 207-283-0158  
www.incon.com