Circuit Specialists, Inc

Triple Output DC Bench Power Supplies With Large LCD

CSI3003X3..............2 x 0-30VDC/0-3A, 1 x 5VDC 3A, Regulated Power Supply
CSI3005X3...............2 x 0-30VDC/0-5A, 1 x 5VDC 3A, Regulated Power Supply

Circuit Specialists Inc
220 S. Country Club Dr., Bldg. #2
Mesa, AZ. 85210
Tel: 800-528-1417/ 480-464-2485
Fax:480-464-5824
Internet: www.CircuitSpecialists.com
General Description:
Your new DC Regulated Power Source provides accurate & stable DC power. It is ideal for test benches, laboratories, schools & repair facilities. The multi-turn voltage control knob helps the user accurately dial in a precise voltage. The large easy to read LCD accurately displays the outputs (voltage & current). This product is expertly manufactured for Circuit Specialists, Inc., and incorporates SMT PC boards & a built in cooling fan for reliable performance & long life.

Features:
*SMD adhesive sheet element technology for internal pcb construction
*Attractive yellow large liquid crystal display shows voltage & current
*Built in cooling fan
*Multiloop high precision voltage regulation
*Progressive current regulation
*Dual terminal system. Safety test style or expandable screw terminals
*Overload protection circuit
*Low ripple voltage: < 1mV P-P
*Output polarity: positive or negative
*Rugged reinforced metal frame construction

Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage</th>
<th>Current</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSI3003X3</td>
<td>2 x 0-30VDC</td>
<td>0-3A</td>
<td>100mV</td>
</tr>
<tr>
<td></td>
<td>1 x 5VDC FIXED</td>
<td>0-3A</td>
<td>NONE</td>
</tr>
<tr>
<td>CSI3005X3</td>
<td>2 x 0-30VDC</td>
<td>0-5A</td>
<td>100mV</td>
</tr>
<tr>
<td></td>
<td>1 x 5VDC FIXED</td>
<td>0-3A</td>
<td>NONE</td>
</tr>
</tbody>
</table>

Source effect: $5 \times 10^{-4} = 2$ mV
Load effect: $5 \times 10^{-4} = 2$ mV
Ripple coefficient: $< 250$ uV
Stepped current: $30$ mA $\pm 1$ mA

Warranty Statement:
Circuit Specialists, Inc. warrants this product to be free from defects caused by workmanship or production error for a period of 12 months after the initial purchase date. Circuit Specialists Inc. will, at its” option, repair or replace any defective unit with a working unit after the defective product has been returned, freight prepaid to Circuit Specialists, Inc. Should you have a defect that is covered by this limited warranty, please contact Circuit Specialists, Inc. (1-800-528-1417/480-464-2485) for an RMA number prior to returning the unit. Products that are damaged from misuse are not covered by this limited warranty.
General Description: Utilizes SMD technology
Single/ Dual Output Light and Compact
Output Polarity: Positive and Negative
LCD Display showing Voltage and Current value
Low Ripple Voltage Less Than 1mV P-P
Overload Protection Circuit
Applicable To School, Production Line, Laboratory and Maintenance

Specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>110-127VAC +/- 1</td>
</tr>
<tr>
<td>Voltage Regulation</td>
<td>CV &lt;= 5x10^-5 mV</td>
</tr>
<tr>
<td>Load Regulation</td>
<td>CV &lt;= 5x10^-5 mV</td>
</tr>
<tr>
<td>Ripple &amp; Noise</td>
<td>CV &lt; 0.5mV r.m.s.</td>
</tr>
<tr>
<td>Voltage Indication Accuracy</td>
<td>LCD +/- 1% + 2 Digits</td>
</tr>
<tr>
<td>Current Indication Accuracy</td>
<td>LCD +/- 2% + 2 Digits</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>0 ~ +40 °C</td>
</tr>
<tr>
<td>Humidity</td>
<td>&lt; 90%</td>
</tr>
<tr>
<td>Dimensions (Dual)</td>
<td>270(W) x 180(H) x 320(D)</td>
</tr>
<tr>
<td>Weight</td>
<td>CSI3003X3: 12.5kg</td>
</tr>
<tr>
<td></td>
<td>CSI3005X3: 13.5kg</td>
</tr>
<tr>
<td>Accessories</td>
<td>Instruction Manual, Power cord, Test Leads</td>
</tr>
</tbody>
</table>
2. Operation

2.1 Front Panel Controls.

(1) Current Indication
(2) Voltage Indication
(3) Fine (10 Turn) adjustment of Voltage
(4) Up/Down Adjustment of Current
(5) Power On/Off
(6) Negative Output Terminal
(7) Positive Output Terminal
(8) Ground Connection
(9) Constant Current Indicator
(10) Constant Current Switch
(11) Parallel Switch
(12) Series Switch
(13) External Power Output Connection

The unit has 2 output displays. Each display has 2 readings. One is Voltage and the second is Current. There are 3 outputs. 2 are 0-30 Volts with 0-3Amps. The third is a 5Volt DC fixed power output with up to 3Amps of current.

The 2, 0-30VDC outputs can be switched to parallel or series allowing for up to 0-60 volts with up to 0-3Amps, or up to 0-30 Volts with up to 0-6Amps.

This unit's fan turns on when the temperature reaches 140 DegF or 60Deg C. It takes a standard 110VAC input only, and it is fuse protected.

2.2 Operating Procedure

2.2.1 For constant Voltage mode make sure #10 is depressed and the LED #9 is off.
2.2.2 For constant current mode make sure #10 is pressed and the LED #9 is on.

3. Attention:

3.1 The mains power must be switched off before servicing and servicing should be referred to a qualified person.
3.2 The unit should be stored in a dry and well ventilated place and the power cord removed from its power source for long periods of inactivity.

4. Accessories:

4.1 Power cord --------- one piece
4.2 Instruction Manual----- one piece
4.3 1 set of Banana plug to Alligator Clips
4.4 1 set of hook up wires for external hook up.