

**omega**

Ω OMEGA®

# PST-4130

## REGULATED POWER SUPPLY

**INSTRUCTION  
SHEET****M0563-0504**

### GENERAL INFORMATION

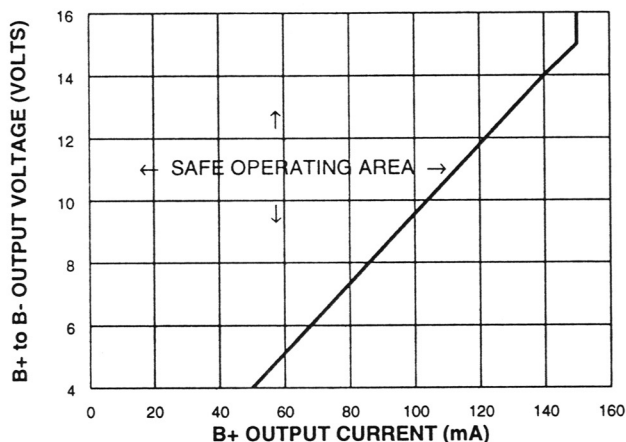
The OMEGA PST-4130 is AC line powered adjustable output power source designed for strain gages and pressure transducers. It can also be used as a high quality voltage source or reference in many applications. The PST-4130 has a split bobbin transformer for high line isolation. It has remote sensing to eliminate line drop errors, and features excellent regulation, stability, and very low noise.

### IMPORTANT NOTICE

Corresponding sense leads must be connected to their corresponding excitation leads either at the sensor or power source for the power to function.

**Jumpers must be installed between:  
1 & 2 terminals, 3 & 4 terminals**

### SAFE OPERATING CURVE

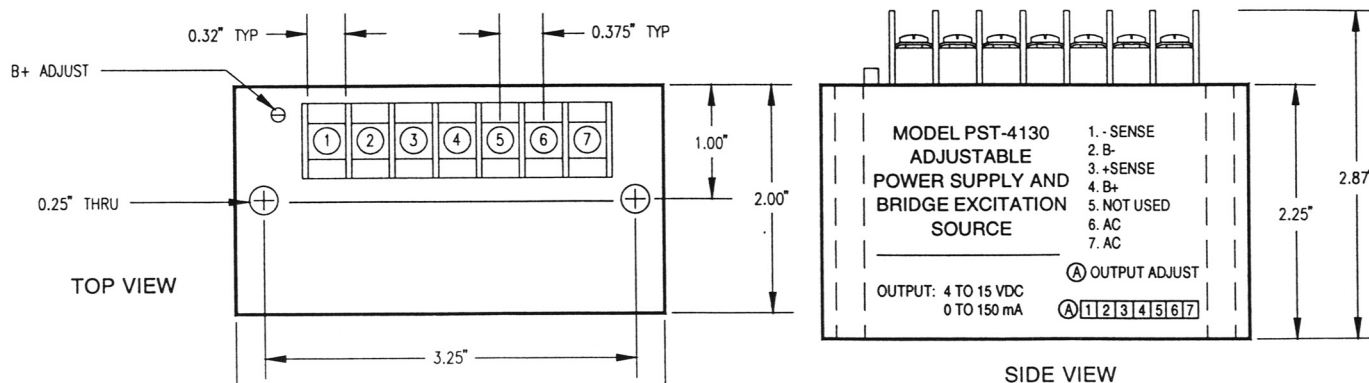


**NOTE:** To operate safely in the "unsafe" area of the curve, at low voltage settings, use an external resistor in the B+ line, to take most of the drop externally, and connect the + sense line in the normal manner. Do not allow prolonged shorts across the output.

### SPECIFICATIONS

|                                    |                                                                     |
|------------------------------------|---------------------------------------------------------------------|
| <b>INPUT:</b>                      | 115 Vac $\pm 10\%$ , 50-60 Hz                                       |
| <b>OUTPUT VOLTAGE:</b>             | Adjustable 4 to 15 Vdc                                              |
| <b>OUTPUT CURRENT:</b>             | 150 mA max (see graph)                                              |
| <b>LINE &amp; LOAD REGULATION:</b> | 0.005%                                                              |
| <b>NOISE:</b>                      | 0.5 mV RMS                                                          |
| <b>STABILITY:</b>                  | 50 ppm/ $^{\circ}$ C                                                |
| <b>OPERATING TEMPERATURE:</b>      | 32 $^{\circ}$ to 158 $^{\circ}$ F (0 $^{\circ}$ to 70 $^{\circ}$ C) |
| <b>STORAGE TEMPERATURE:</b>        | -13 to 185 $^{\circ}$ F (-25 $^{\circ}$ to 85 $^{\circ}$ C)         |
| <b>LINE ISOLATION:</b>             | 1500 Vdc                                                            |
| <b>WEIGHT:</b>                     | 18 oz. (510 g)                                                      |

### DIMENSIONS



It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. **WARNING:** These products are not designed for use in, and should not be used for, human applications.



## WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

**OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.**

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

## RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

PATENT NOTICE: U. S. Pat. No. 6,074,089; 5,465,838 / Canada 2,228,333; 2,116,055 / UK GB 2,321,712 / Holland 1008153 / Israel 123052 / France 2 762 908 / EPO 0614194. Other patents pending.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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