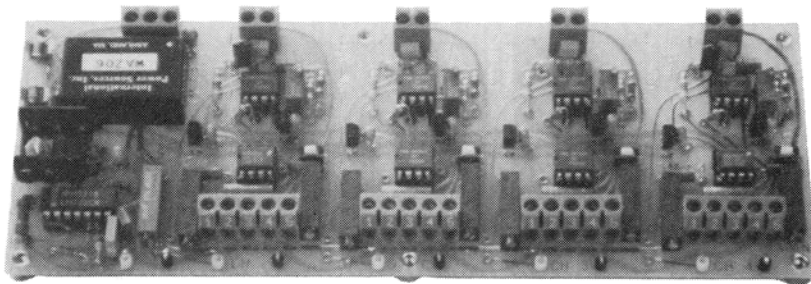


# WIDE-BAND 4 Channel DC POWERED AMPLIFIER / CONDITIONER

The TM-1-4 is a spin-off from the TM-1 Amplifier/Conditioner module. Product research dictates the requirement for more capacity and higher frequency response. With the introduction of Burr-Brown's new INA-118 instrument amplifier chip, the aforementioned can be accomplished at an affordable price. It is anticipated that the TM-1-4 will have wide application in industries such as: process control, automotive testing and structural testing. Combined with our BC-4 Bridge Completion Unit, it is a very cost effective approach to strain gage instrumentation.

**MADE IN USA**

## FEATURES

- 12 VDC powered
- Precision Controls
- Excellent Stability
- R-Cal resistor and push button per channel
- Adjustable Excitation
- DC to 7 K Hz band-width
- Test jacks
- Low per channel cost

## SPECIFICATIONS

### AMPLIFIER SECTION

Type : Bipolar, Differential  
 Gain Range : 100 to 1200 or 10 to 120  
 Input Sensitivity : 1 MV/V min for 8 V output  
 Output Voltage : 0 to  $\pm 8$  VDC (linear to 9.5)  
 Output Current : 0 to 10 MA  
 Non-Linearity : .01% maximum  
 Compliance : .1% plus vs minus full scale  
 Stability :  $\pm .1\%$  for 24 hours  
 Tempco :  $\pm .01\%$  full scale/°C  
 Noise and Ripple : Less than 10 MV P-P at gain = 1000  
 Filter Type : 2 Pole Butterworth, 12 db/octave  
 Frequency Response : DC to 7 K Hz (4-5000 Hz available, no charge)

### BRIDGE SECTION

Excitation Voltage : 2 - 8 VDC  $\pm .25$   
 Sensor Resistance : 120 OHM min, 1000 OHM max  
 Balance Range :  $\pm 3\%$  of bridge resistance

### GENERAL

Weight : Less than 6 oz.  
 Size : 3 x 8 x .8 inches tall  
 Mounting : Corner standoffs, 4-40 thread  
 Input/Output : Via screw terminals  
 Operating Temp : 0 to 70° C  
 Power Required : 12 to 15 VDC at 370 MA

### OPTIONS

-15 : Change in excitation section allows 2 to 12 VDC bridge excitation when operating system from 15 VDC  
 -F : Specifies a filter lower than standard cut-off frequency