

VDC/mADC POWERLESS ANALOG METER REPLACEMENT DPM No Power Supply Required!

**MODEL
591**

U.S. Patent No.
4,908,569

Features

- 500 μ A-200mA & 4-140VDC Ranges
- Signal Powered
- 3½" Standard Meter Case
- .5" High LCD Display
- Rugged
- High Accuracy & Resolution
- Low Cost
- Same Connections as most Analog Meters
- Optional Backlight
- MTBF: 80,000 Hours

DESCRIPTION: Model 591 requires no external power source since it draws its energy from the signal it measures. It requires however, a minimum voltage and current to operate which varies with the model number (see Ordering Information), care must be taken not to overload the signal source in order to have a reliable and accurate operation. When a backlight is ordered with these models it must always be externally powered (5VDC \pm 20%).

BACKLIGHT: Standard display is reflective black digits over silver background. An optional backlight is available at time of ordering. When ordered, the digits are black over an illuminated green background. The intensity is not adjustable, (see Typical Connections). **Not available with 7-32VDC power option.**

LIGHT SOURCE: Electroluminescent (E.L.) requiring 120VAC @ 400Hz to operate. If ordered, an internal DC-AC converter is installed and requires 5VDC at 70mA. The E.L. has uniform light output, and its life expectancy is in excess of 15,000 hours.

POWER SUPPLIES (for Backlight): When required and ordered, it will be externally mounted. Two types are available, the "Open Frame" style accepts 120/240VAC and delivers 5VDC @ up to 400mADC. The "Power Pack" is a wall plug in module available only for 120VAC input and delivers 5VDC at up to 100mADC.



D.C. VOLTS/AMPS

DECIMAL POINTS: Installed at Otek and must be specified at the time of ordering.

SPECIFICATIONS AT 25°C

Accuracy and Linearity	\pm 0.05% of F.S. \pm 1 count
Resolution	0.05% of F.S.
Minimum Input Signal	4VDC/500 μ A
Maximum Input Signal	150% of specified range
Polarity	Unipolar
Temperature Coefficient	100PPM/°C
Measuring Method	Dual slope integration
Span Adjustment	\pm 40% of full scale
Zero	Automatic
Backlight Operating Range (for DC-AC)	70mA at 4-6VDC
Operating/Storage Temperature	-10° to +60°C/-20° TO +70°C
Display5" Reflective LCD
MTBF	80,000 Hours

CASE MATERIAL: U.L. approved ABS Polycarbonate 94VO rated. Black matte with clear window.

ORDERING INFORMATION (11/1/00)

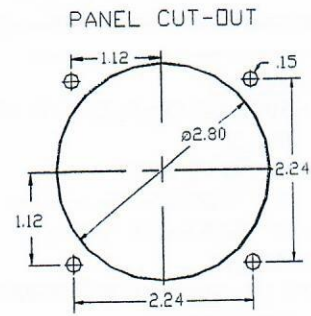
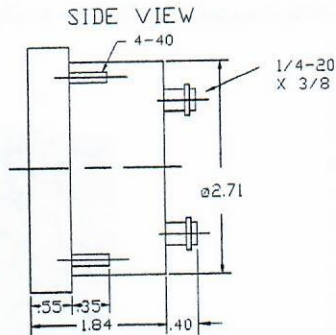
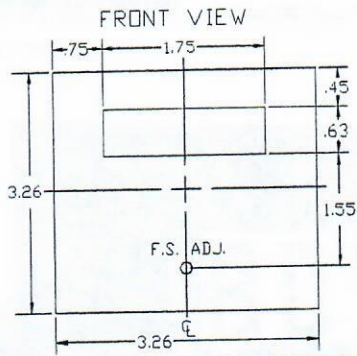
MODEL **5** **9** **1-1** **□** **□** **□**

INPUT RANGE (2)	BACKLIGHT (1) & DECIMAL POINT
01 0.5-2mADC	0 No and No D.P.
02 0.5-20mADC	1 No and 1.XXX D.P.
03 0.5-200mADC	2 No and 1X.XX D.P.
04 4-7VDC/1mADC	3 No and 1XX.X D.P.
05 7-30VDC/1mADC	4 Backlight and No D.P.
06 25-50VDC/1mADC	5 Bklt and 1.XXX D.P.
07 50-100VDC/1mADC	6 Bklt and 1X.XX D.P.
08 90-140VDC/1mADC	7 Bklt and 1XX.X D.P.

- (1) Backlight must be externally powered. See mechanical info. on back page. Ordered separately.
- (2) Standard calibration is per range selected (i.e 4-7VDC=400-700 counts, 0.2-2mA=200-2000 counts) unless otherwise specified

591 MECHANICALS & TYPICAL CONNECTIONS

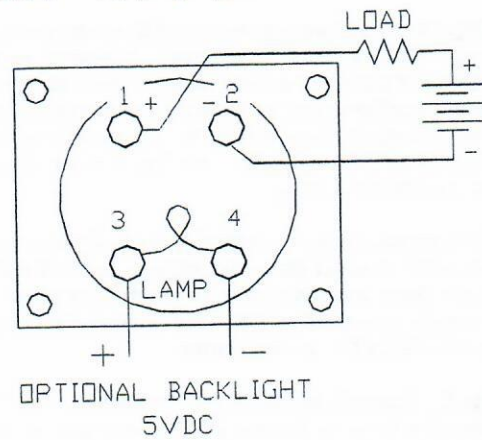
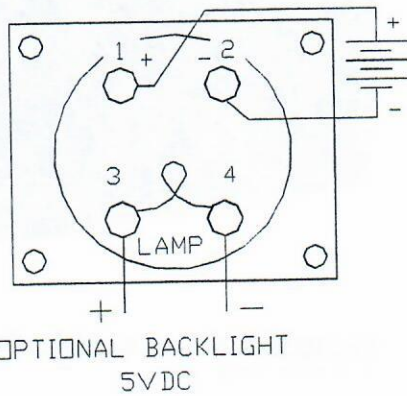
MECHANICALS



MOD. 591 POWERLESS VDC/mADC TYPICAL CONNECTIONS (REAR VIEW)

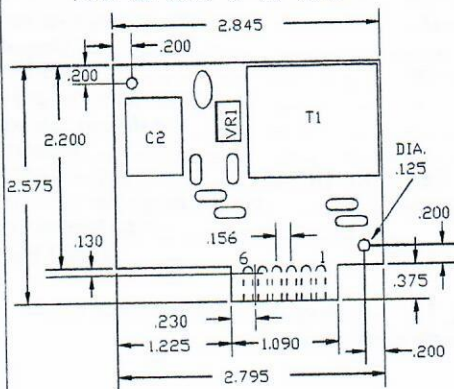
591 VOLTS DC

591 AMPS DC

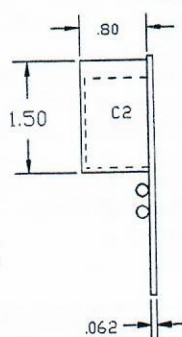


MECHANICALS FOR POWER SUPPLIES

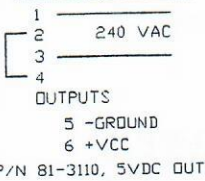
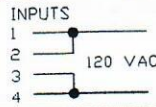
OPEN FRAME STYLE
P/N 81-3110 & 81-3112



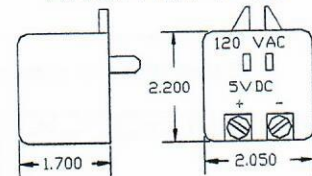
SIDE VIEW



OPEN FRAME
POWER SUPPLY
TYPICAL CONNECTIONS



POWER PACK STYLE



ORDER P/N 75-3110 FOR 5VDC

F#87MC591.DWG

FAX: 520-790-2808
TOLL FREE: 1-877-227-6835
E-MAIL: sales@otekcorp.com

520-748-7900

OTTEK™
CORP.

SINCE 1974

4016 E. TENNESSEE ST.
TUCSON, AZ. 85714 U.S.A.

MADE
IN
USA

