



## Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

### SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

### *InstraView*<sup>SM</sup> REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at [www.instraview.com](http://www.instraview.com) ↗

### WE BUY USED EQUIPMENT

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**Contact us:** (888) 88-SOURCE | [sales@artisanng.com](mailto:sales@artisanng.com) | [www.artisanng.com](http://www.artisanng.com)



- 500V TO 10KV @ 1.9W TO 4W
- LOW COST MODULAR DESIGN
- EXCELLENT STABILITY & REGULATION
- LOW NOISE & RIPPLE
- ARC & SHORT CIRCUIT PROTECTED

Spellman's Bertan brand of PMT modular high voltage power supplies offer well regulated, fixed polarity outputs up to 10kV, which operate off a low voltage DC input voltage. These fully enclosed modules are specifically designed with proprietary linear power conversion techniques to provide exceptionally low ripple and noise. The PMT is ideal for precision applications including: photomultiplier tubes, solid state detectors and ultrasonic transducers.

The output voltage can be controlled by either a local internal potentiometer or by a customer provided ground referenced signal for remote operation. Additionally a ground referenced output voltage monitor signal is provided. The PMT can be powered from either a single positive voltage source or a split  $\pm$  voltage source, providing application flexibility.

### TYPICAL APPLICATIONS

- Photomultiplier tubes
- Ultrasonic transducers
- Solid state detectors

### SPECIFICATIONS

#### Input Voltage:

- Option 1: +24Vdc to +30Vdc @ 400mA
- Option 3:  $\pm$ 12Vdc to  $\pm$ 18Vdc @ 400mA
- specify "-1" (option 1) or "-3" (option 3) when ordering

#### Output Polarity:

Positive or negative, specify at time of order

#### Output Voltage:

See "model ratings" table

#### Output Current:

See "model ratings" table

#### Voltage Regulation:

- Line:  $\pm$ 0.001% of rated output voltage for a +1% input line change
- Load:  $\pm$ 0.001% of rated output voltage for a full load change

#### Ripple:

See "model ratings" table

#### Stability:

$\leq$ 0.005% per hour, 0.02% per 8 hours, after a 1/2 hour warm up

#### Temperature Coefficient:

$\leq$ 50ppm/ $^{\circ}$ C

#### Arc/Short Circuit:

All units are fully arc and short circuit protected and will limit continuous short circuit output current to less than 120% of maximum rated output current.

#### Operating Temperature

0 $^{\circ}$ C to +50 $^{\circ}$ C

#### Storage Temperature:

-40 $^{\circ}$ C to +85 $^{\circ}$ C

#### Humidity:

20% to 85% RH, non-condensing

#### Interface Connector:

12 position card edge connector, mate provided with unit

#### Output Connector:

24" (610mm) of RG-59B/U shielded cable, unterminated

#### Cooling:

Convection cooled.

#### Dimensions:

3.875" W X 1.25" H X 6.3125" D (98mm x 32mm x 160mm)

#### Weight:

$\leq$ 2.0 pounds (0.9kg)

### MODEL RATINGS TABLE

Model	Output Voltage	Output Current	Ripple (Vpp)
PMT-05C-P,N	0 to 500V	0 to 8mA	5mV
PMT-10C-P,N	0 to 1kV	0 to 4mA	4mV
PMT-20C-P,N	0 to 2kV	0 to 2mA	2mV
PMT-30C-P,N	0 to 3kV	0 to 1mA	6mV
PMT-50C-P,N	0 to 5kV	0 to 0.5mA	10mV
PMT-75C-P,N	0 to 7.5kV	0 to 0.25mA	100mV
PMT-100C-P,N	0 to 10kV	0 to 0.2mA	100mV

Specify "P" for positive polarity or "N" for negative polarity

### INTERFACE CONNECTOR

Signal	Parameters	Option 1 Pin Number	Option 3 Pin Number
+ Power Input	+24Vdc to +30Vdc or +12Vdc to +18Vdc	3&4	3 & 4 & 5
- Power Input	-12Vdc to -18Vdc	n/a	2 & 6
Ground	Ground	1 & 12	1 & 12
Voltage Monitor	See Voltage Monitor Table	11	11
+9Vdc Reference	+9.0Vdc, 10mA maximum	10	10
Voltage Program Input	0 to 9Vdc = 0 to 100% rated output, 100kΩ Zin	8	8
Local Voltage Program	Internal program potentiometer wiper, 0 to 9Vdc	9	9

### VOLTAGE MONITOR TABLE

Model	Signal Voltage	Signal Impedance
PMT-05C-P,N	0 to 5 volts	50k ohms
PMT-10C-P,N	0 to 1 volts	10k ohms
PMT-20C-P,N	0 to 2 volts	25k ohms
PMT-30C-P,N	0 to 3 volts	30k ohms
PMT-50C-P,N	0 to 5 volts	100k ohms
PMT-75C-P,N	0 to 7.5 volts	200k ohms
PMT-100C-P,N	0 to 5 volts	10k ohms

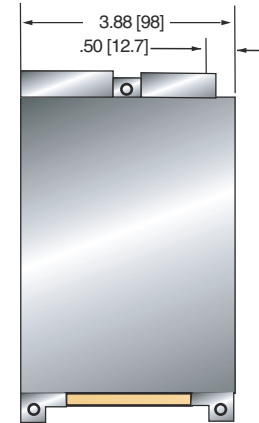
Note: The Voltage Monitor polarity matches the high voltage output polarity



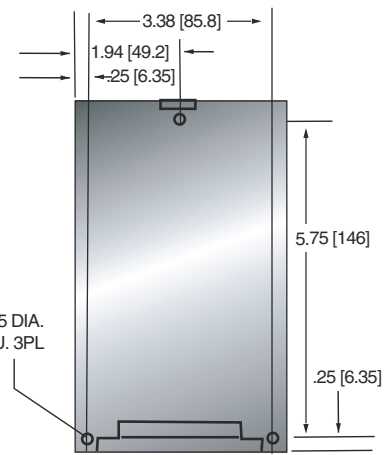
E137710  
Up to 7.5kV only

DIMENSIONS: in.[mm]

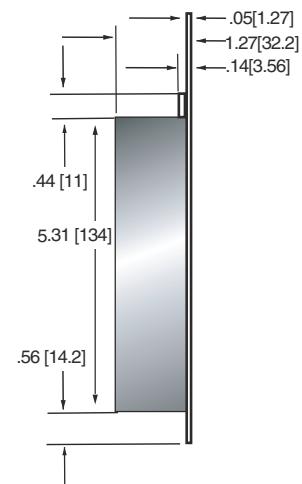
#### TOP VIEW



#### BOTTOM VIEW



#### FRONT VIEW





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