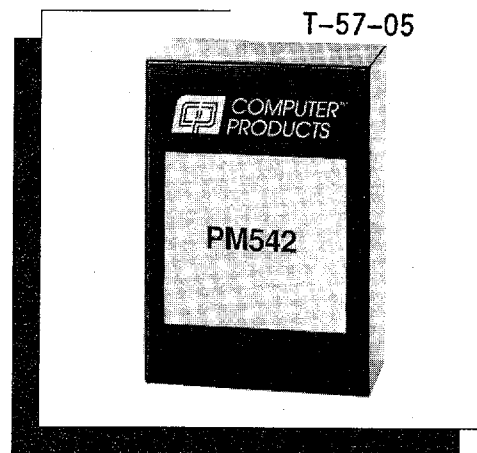


# PM500 SERIES

## 1 to 10 Watt Dual and Triple Output Encapsulated Power Modules

- Split-Bobbin Wound
- 2500 VAC Isolation
- UL Recognized
- CSA Certified
- 115, 220, or 240 VAC Input
- Short Circuit Protection
- 2 Year Warranty



These popular PC-mountable linear power modules feature dual and triple outputs with different dual and triple models. The most commonly used output voltages of 5V,  $\pm 12V$ ,  $\pm 15V$ , and  $\pm 24V$  are featured. Overvoltage crowbar protection is a standard feature on 5V outputs. Most models are UL recognized and CSA certified. For maximum safety, all power transformers are split-bobbin wound, rather than layer wound, to give total isolation between primary and

secondary. Standard input voltage is 115 VAC at 50 to 400 Hz; other optional inputs are 100, 220, and 240 VAC. The industry standard  $2.5 \times 3.5$  inch cases are available in standard and alternate pin configurations, for second sourcing applications. Input/output isolation voltage is 2500 VAC and output current-limiting short circuit protection is standard.

## SPECIFICATIONS

All specifications are typical at nominal line, full load and 25°C unless otherwise noted.

OUTPUT SPECIFICATIONS		
Voltage Accuracy		$\pm 1.0\%$ , max.
Voltage Balance	Dual Outputs	$\pm 1.0\%$ , max.
Temperature Coefficient		$\pm 0.02\%/^{\circ}C$ .
Short Circuit Protection		Automatic
Overvoltage Crowbar	5V Outputs	6.2V, nominal
INPUT SPECIFICATIONS		
Input Voltage Range	No Suffix	105 to 125 VAC
	Other Models	See Table
Input Frequency		50 to 400 Hz
Derating at 400 Hz		Consult Factory

### NOTE:

All models are available with alternate pin-outs designated by suffix letter "S". Consult Factory. All models are also available with four optional input voltage ranges designated by the suffixes shown in table. When ordering, specify the complete model number followed by input voltage and alternate pin-out designations, if any. For example, PM505, etc.

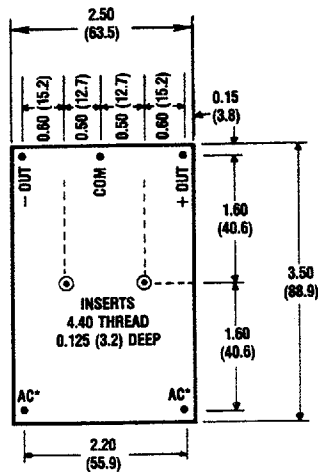
Input Voltage	Suffix
115 $\pm$ 10 VAC	(NONE)
220 $\pm$ 20 VAC	D
240 $\pm$ 20 VAC	K

GENERAL SPECIFICATIONS		
Isolation Voltage		2500 VRMS
Isolation Capacitance		50 pF
Isolation Resistance		50 megohms
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature Range		-25°C to +71°C
Derating	50°C to 71°C	2.5%/°C
Storage Temperature Range		-25°C to +85°C
Humidity	Non-Condensing	20% to 95% RH
Cooling		Free-Air Convection
MTBF		710,000 hours
PHYSICAL SPECIFICATIONS		
Weight	Case B1	12 oz. (340 grams)
	Case B2	14.4 oz. (408 grams)
	Case B3	22.4 oz. (635 grams)
Case Material		Non-Conductive Black Plastic

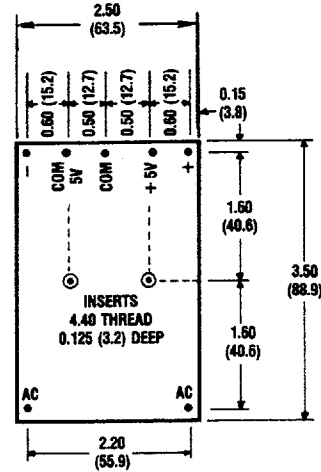
Output Voltage	Output Current	OVP	Regulation		Ripple and Noise	UL	CSA <sup>1</sup>	Alt Pin Out	Case	Model Number
			Line	Load						
±12 VDC	± 25 mA		±0.2%	±0.2%	2.0 mV RMS	✓	✓	S	B1	PM509
±12 VDC	± 50 mA		±.02%	±.02%	0.5 mV RMS	✓	✓	S	B1	PM510
±12 VDC	±120 mA		±.02%	±.02%	0.5 mV RMS	✓	✓	S	B1	PM536
±12 VDC	±240 mA		±.02%	±.02%	0.5 mV RMS	✓	✓	S	B2	PM537
±12 VDC	±400 mA		±.02%	±.02%	0.5 mV RMS	✓	✓	S	B3	PM597
±15 VDC	± 25 mA		±0.2%	±0.2%	2.0 mV RMS	✓	✓	S	B1	PM538
±15 VDC	± 65 mA		±.02%	±.02%	0.5 mV RMS	✓	✓	S	B1	PM553
±15 VDC	±100 mA		±.02%	±.02%	0.5 mV RMS	✓	✓	S	B1	PM505
±15 VDC	±150 mA		±.02%	±.02%	0.5 mV RMS	✓	✓	S	B2	PM570
±15 VDC	±200 mA		±.02%	±.02%	0.5 mV RMS	✓	✓	S	B2	PM565
±15 VDC	±350 mA		±.02%	±.02%	1.0 mV RMS	✓	✓	S	B3	PM501
<b>Triple Output</b>										
5V ± 12 VDC	300/±180 mA	✓	±.02%	±.05%/±.02%	0.5 mV RMS	✓	✓	S	B2	PM595
5V ± 12 VDC	500/±120 mA	✓	±.02%	±.05%/±.02%	0.5 mV RMS	✓	✓	S	B2	PM591
5V ± 12 VDC	1000/±150 mA	✓	±.02%	±.01%/±.02%	1.0/0.5 mV RMS	✓	✓	S	B3	PM592
5V ± 15 VDC	300/±150 mA	✓	±.02%	±.05%/±.02%	0.5 mV RMS	✓	✓	S	B2	PM594
5V ± 15 VDC	500/±100 mA	✓	±.02%	±.05%/±.02%	0.5 mV RMS	✓	✓	S	B2	PM590
5V ± 15 VDC	1000/±150 mA	✓	±.02%	±.01%/±.02%	1.0/0.5 mV RMS	✓	✓	S	B3	PM593

NOTE 1: Overvoltage protection is on 5V output.

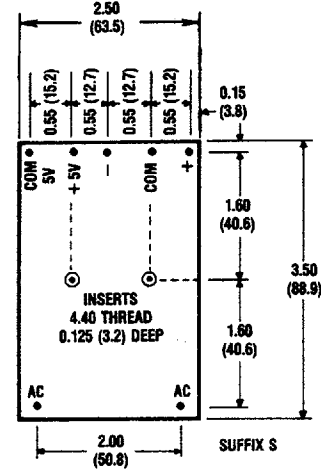
**DUAL OUTPUT MODELS**



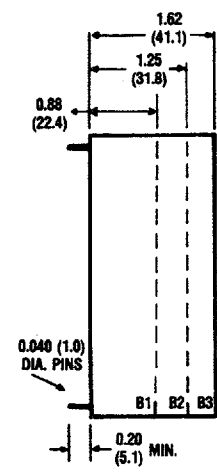
**TRIPLE OUTPUT MODELS STANDARD PINOUT**



**TRIPLE OUTPUT MODELS ALTERNATE PINOUT**



**SIDE VIEW**



BOTTOM VIEW — ALL DIMENSIONS IN INCHES (mm)

**International Safety Standard Approvals**



CSA 22.2-143 and -154 Reg. File No. LR59996



UL478 Reg. File No. E65890