



[ 2 YEAR WARRANTY ]

## PM500 SERIES

Single, dual and triple output

- **Encapsulated package**
- **1 to 10.5W units**
- **115VAC input (230VAC version, see PM500CE series)**
- **PCB mounting**
- **Short circuit protection**
- **UL and CSA safety approvals**

The PM500 series is an encapsulated, board mountable linear AC/DC power module. The series has single, dual and triple output models with industry standard output configurations operating from an input voltage of 115VAC, making the PM500 series suitable for a wide range of low power PCB applications. The PM500 series includes 1W to 10.5W modules. Each module has short-circuit protection and the 5V outputs also have overvoltage protection. Conservative design and rating of these modules results in reliable operation and long life. The PM500 design is a low emissions design with tightly regulated outputs making the series especially suitable for test, measurement and instrumentation equipment. The series also includes 2 sub-miniature modules for low power applications where space is critical.

## SPECIFICATION

All specifications are typical at nominal input, full load at 25°C unless otherwise stated

OUTPUT SPECIFICATIONS		
Voltage accuracy		±1.0% max.
Voltage adjustability (See Note 1)	PM529 and PM563 only	Yes
Line regulation		See table
Load regulation		See table
Temperature coefficient		±0.02%/°C
Overvoltage protection	See table on facing page for relevant models	6.2V typical
Output power limit	Typical	130% to 200% FL
Short circuit protection	Switch off/on	100% to 200% FL
INPUT SPECIFICATIONS		
Input voltage range		115 ±10VAC
Input frequency range	(See Note 3)	47Hz to 400Hz
Safety ground leakage current	50Hz	Less than 3.5mA

GENERAL SPECIFICATIONS		
Efficiency		40% typical
Isolation voltage		700VAC
Approvals and standards	(See Note 5)	UL478 CSA C22.2 No. 143 No. 154
Case material	UL94V-0	Non-conductive black plastic
Weight	Case A Case B1 Case B2 Case B3 Case H	181g (6.4oz) 340g (12oz) 408g (14.4oz) 635g (22.4oz) 227g (8oz)
MTBF (See Note 4)		710,000 hours
ENVIRONMENTAL SPECIFICATIONS		
Thermal performance	Operating amb. Non-operating amb. Derating, 50°C to 71°C Cooling	-25°C to +71°C -25°C to +85°C 2.5%/°C Free-air convection cooled
Relative Humidity	Non-condensing	20% to 95% RH

### International Safety Standard Approvals



UL478 Reg. File No. E131987



CSA C22.2 No. 143 and No. 154 Reg. File No. LR41062C

# 1 to 10.5 Watt AC/DC encapsulated modules

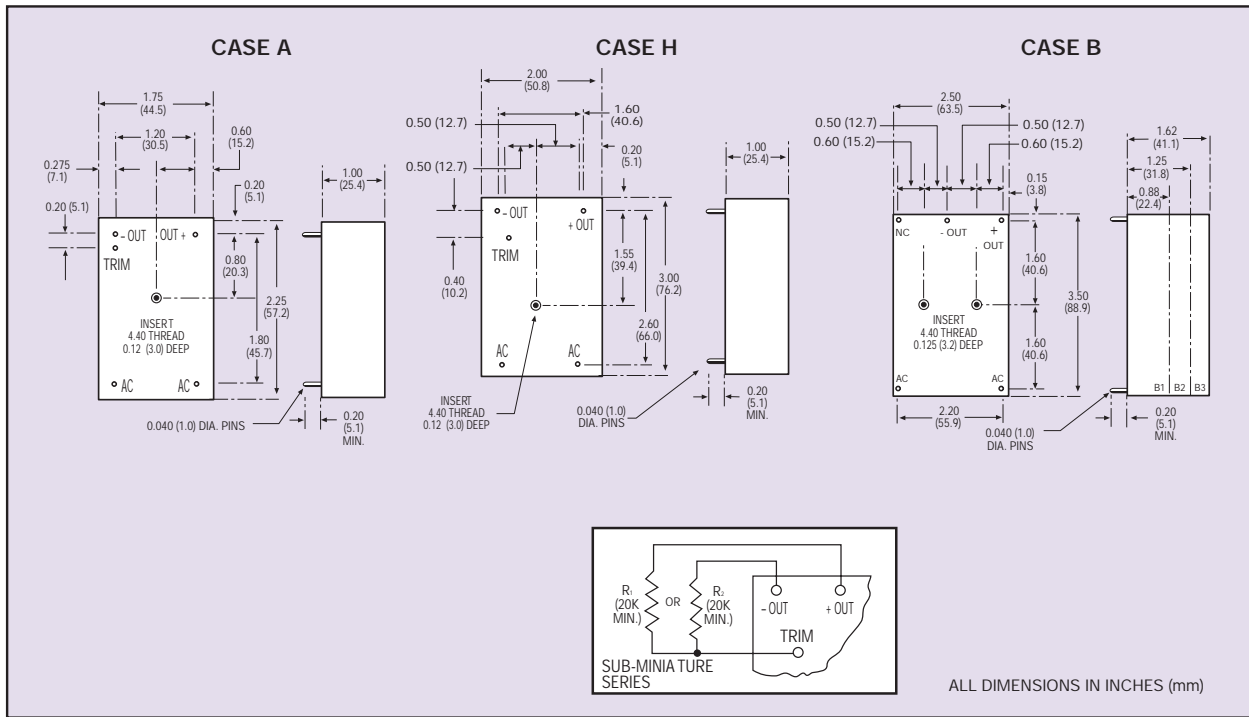
OUTPUT VOLTAGE	OUTPUT CURRENT	OVP	REGULATION		RIPPLE AND NOISE	CASE	MODEL NUMBERS
			LINE	LOAD			
SINGLE OUTPUT							
5VDC	500mA	Yes	±0.02%	±0.04%	1mV rms	B1	PM534
5VDC	1000mA	Yes	±0.02%	±0.04%	1mV rms	B2	PM542
5VDC	2000mA	Yes	±0.02%	±0.05%	1mV rms	B3	PM545
12VDC	240mA	No	±0.02%	±0.02%	0.5mV rms	B2	PM515
SUB MINIATURE SINGLE OUTPUT SERIES <sup>(1)</sup>							
5VDC	250mA	No	±0.05%	±0.05%	0.5mV rms	H	PM529
12VDC	100mA	No	±0.02%	±0.02%	0.5mV rms	A	PM563
DUAL OUTPUT							
±12VDC	±120mA	No	±0.02%	±0.02%	0.5mV rms	B1	PM536
±12VDC	±400mA	No	±0.02%	±0.02%	0.5mV rms	B3	PM597
±15VDC	±25mA	No	±0.20%	±0.20%	2mV rms	B1	PM538
±15VDC	±100mA	No	±0.02%	±0.02%	0.5mV rms	B1	PM505
±15VDC	±200mA	No	±0.02%	±0.02%	0.5mV rms	B2	PM565
±15VDC	±350mA	No	±0.02%	±0.02%	1mV rms	B3	PM501
TRIPLE OUTPUT <sup>(2)</sup>							
5V/±12VDC	300/±180mA	No	±0.02%	±.05%/±.02%	0.5mV rms	B2	PM595S
5V/±12VDC	1000/±150mA	Yes	±0.02%	±.01%/±.02%	1.0/0.5mV rms	B3	PM592
5V/±15VDC	300/±150mA	Yes	±0.05%	±.10%/±.05%	0.5mV rms	B2	PM594
5V/±15VDC	500/±100mA	Yes	±0.05%	±.10%/±.05%	0.5mV rms	B2	PM590
5V/±15VDC	1000/±150mA	Yes	±0.02%	±.01%/±.02%	1.0/0.5mV rms	B3	PM593

## Notes

- Trim connection on all sub-miniature series modules provides a means of externally adjusting a units output voltage precisely to its labelled value. To raise the output voltage, connect a resistance (20kΩ, min.) between the trim terminal and the positive (+) output terminal. To lower the output voltage, connect a resistance (20kΩ, min.) between the trim terminal and the negative (-) output terminal.
- Triple output models only: on standard pin-out models the 5V output common is isolated from the ±12VDC or ±15VDC common.
- Some units should be derated for operation at 400Hz. Please contact the factory for details.
- M.T.B.F. figures are based on actual product performance. Consult factory for details.
- All models are only for inclusion by professional installers within other equipment and must not be operated as a stand alone product.

# 1 to 10.5 Watt AC/DC encapsulated modules

## Single output PM500 series



## Dual and triple output PM500 series

