



[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 subminiature 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 SPECIFICATION | ONS | |
|---------------------------------------|--|--------------------|
| 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 mo | 6.2V typical odels |
| Output power limit | Typical | 130% to 200% FL |
| Short circuit protection | Switch off/on | 100% to 200% FL |
| INPUT SPECIFICATION | IS | |
| 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 A 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 ar Derating, 50°C to Cooling | -25°C to +71°C mb25°C to +85°C 71°C 2.5%/°C Free-air convection cooled | | | | | |
| Relative Humidity | Non-condensing | 20% to 95% RH | | | | | |

International Safety Standard Approvals



TLL 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 OUTPUT | 01/15 | REGI | ULATION | RIPPLE AND | CACE | MODEL NUMBERS | | |
|--|-------------|------|---------|-------------|---------------|---------------|---------------|--|
| VOLTAGE | CURRENT | OVP | LINE | LOAD | NOISE | CASE | MODEL NUMBERS | |
| 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 | В3 | PM545 | |
| 12VDC | 240mA | No | ±0.02% | ±0.02% | 0.5mV rms | B2 | PM515 | |
| SUB MINIATURE SINGLE OUTPUT SERIES (1) | | | | | | | | |
| 5VDC | 250mA | No | ±0.05% | ±0.05% | 0.5mV rms | Н | PM529 | |
| 12VDC | 100mA | No | ±0.02% | ±0.02% | 0.5mV rms | А | 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 | В3 | 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 | В3 | PM501 | |
| TRIPLE OUTPUT (2) | | | | | | | | |
| 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 | В3 | 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

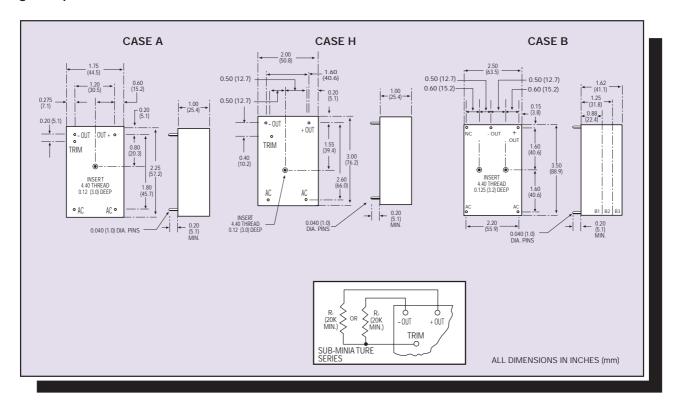
- Trim connection on all sub-miniature series modules provides a means of externally adjusting a units output voltage precisely to its labelled value. To raise the output voltage, connect a resistance ($20k\Omega$, min.) between the trim terminal and the positive (+) output terminal. To lower the output voltage, connect a resistance ($20k\Omega$, 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.
- 3 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.



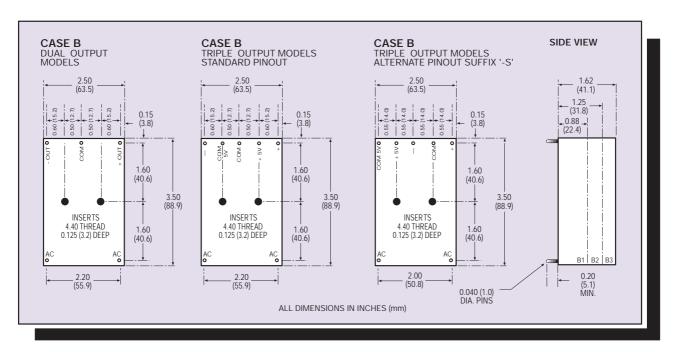
http://www.artesyn.com

1 to 10.5 Watt AC/DC encapsulated modules

Single output PM500 series



Dual and triple output PM500 series



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