



[2 YEAR WARRANTY]

PM500CE SERIES

Single, dual and triple output

- · Encapsulated package
- 1 to 10.5W units
- 230VAC input (115VAC version, see PM500)
- PCB mounting
- · Short circuit protection
- EN55022, EN55011 conducted emissions level B
- EN61000-4-2, -3, -4, -5, -6 immunity compliant
- Meets EN60950

The PM500CE series is an encapsulated, board mountable linear AC/DC power module with the CE mark to demonstrate compliance with the Low Voltage Directive for European applications. The series has single, dual and triple output models with industry standard output configurations operating from an input voltage of 230VAC making the PM500CE series suitable for a wide range of low power PCB applications. The PM500CE 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 PM500CE design is a low emissions design with tightly regulated outputs making the series especially suitable for test, measurement and instrumentation equipment.

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 | | Yes | | | | | | |
| Line regulation | | See table | | | | | | |
| Load regulation | | See table | | | | | | |
| Temperature coefficient | | ±0.02%/°C | | | | | | |
| Overvoltage protection (See Note 4) | 5V outputs only | 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 | | 230VAC ±10% | | | | | | |
| Input frequency range | (See Note 2) | 47Hz to 400Hz | | | | | | |
| Safety ground leakage current | | <3.5mA @ 50Hz | | | | | | |

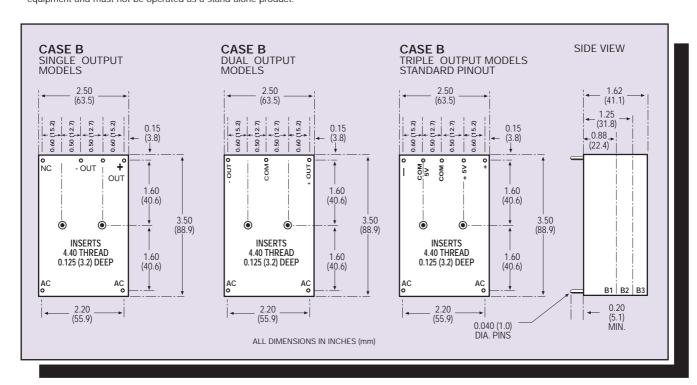
| EMC CHARACTERISTICS | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| Conducted emissions Radiated emissions ESD air ESD contact Surge Fast transients Radiated immunity Conducted immunity | EN55022 EN55022 EN61000-4-2, level 3 EN61000-4-5, level 3 EN61000-4-4, level 3 EN61000-4-3, level 3 EN61000-4-6, level 3 | Level B Level B Perf. criteria 1 Perf. criteria 1 Perf. criteria 1 Perf. criteria 1 Perf. criteria 1 Perf. criteria 1 | | | | | | |
| GENERAL SPECIFICATIONS | | | | | | | | |
| Efficiency | | 40% typical | | | | | | |
| Isolation voltage | | 3000VAC | | | | | | |
| Isolation capacitance | | 50pF | | | | | | |
| Approvals and standards | (See Note 5) | Meets EN60950 | | | | | | |
| Case material | UL94V-0 | Non-conductive black plastic | | | | | | |
| Weight | Case B1 Case B2 Case B3 | 340g (12oz) 408g (14.4oz) 635g (22.4oz) | | | | | | |
| MTBF (See Note 3) | | 710,000 hours | | | | | | |
| ENVIRONMENTAL SPECIFICATIONS | | | | | | | | |
| Thermal performance | Operating amb. Non-operating amb. Derating, 50°C to 71°C Cooling Fr | -25°C to +71°C -25°C to +85°C C 2.5%/°C ee-air convection cooled | | | | | | |
| Relative Humidity | Non-condensing | 20% to 95% RH | | | | | | |

1 to 10.5 Watt AC/DC encapsulated modules

| OUTPUT | OUTPUT | OVP (4) | REGU | LATION | RIPPLE AND NOISE | CASE | AVAILABLE MODELS | | |
|-------------------|---------------|---------|--------|-------------|---------------------|------|------------------|--|--|
| VOLTAGE | CURRENT | OVP (*) | LINE | LOAD | | | | | |
| | SINGLE OUTPUT | | | | | | | | |
| 5VDC | 500mA | Yes | ±0.02% | ±0.04% | 1mV rms | B2 | PM534CE | | |
| 5VDC | 1000mA | Yes | ±0.02% | ±0.04% | 1mV rms | B2 | PM542CE | | |
| 5VDC | 2000mA | Yes | ±0.02% | ±0.05% | 1mV rms | В3 | PM545CE | | |
| DUAL OUTPUT | | | | | | | | | |
| ±12VDC | ±240mA | No | ±0.02% | ±0.02% | 0.5mV rms | B2 | PM537CE | | |
| ±12VDC | ±400mA | No | ±0.02% | ±0.02% | 0.5mV rms | В3 | PM597CE | | |
| ±15VDC | ±100mA | No | ±0.02% | ±0.02% | 0.5mV rms | B2 | PM505CE | | |
| ±15VDC | ±200mA | No | ±0.02% | ±0.02% | 0.5mV rms | B2 | PM565CE | | |
| ±15VDC | ±350mA | No | ±0.02% | ±0.02% | 1mV rms | В3 | PM501CE | | |
| TRIPLE OUTPUT (1) | | | | | | | | | |
| 5V/±12VDC | 500/±120mA | Yes | ±0.02% | ±.05%/±.02% | 0.5mV rms | B2 | PM591CE | | |
| 5V/±12VDC | 1000/±150mA | Yes | ±0.02% | ±.01%/±.02% | 1.0/0.5mV rms | В3 | PM592CE | | |
| 5V/±15VDC | 500/±100mA | Yes | ±0.05% | ±.10%/±.05% | 0.5mV rms | B2 | PM590CE | | |
| 5V/±15VDC | 1000/±150mA | Yes | ±0.02% | ±.01%/±.02% | 1.0/0.5mV rms | В3 | PM593CE | | |

Notes

- Triple output models only: 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.
- Triple output models only: overvoltage protection is only available on the
- All models are only for inclusion by professional installers within other equipment and must not be operated as a stand alone product.



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