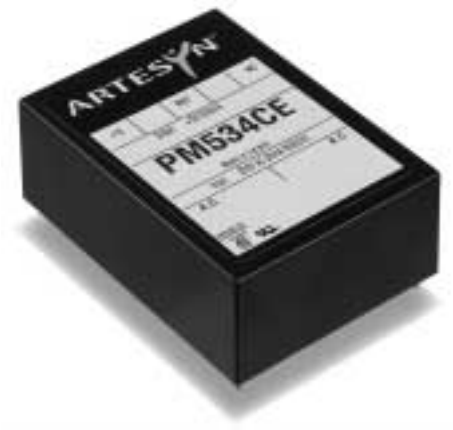
ARTESYN TECHNOLOGIES

PM500CE SERIES

Single, dual and triple output



[2 YEAR WARRANTY]

CE (LVD)

- **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	EN55022	Level B
Radiated emissions	EN55022	Level B
ESD air	EN61000-4-2, level 3	Perf. criteria 1
ESD contact	EN61000-4-2, level 4	Perf. criteria 1
Surge	EN61000-4-5, level 3	Perf. criteria 1
Fast transients	EN61000-4-4, level 3	Perf. criteria 1
Radiated immunity	EN61000-4-3, level 3	Perf. criteria 1
Conducted immunity	EN61000-4-6, level 3	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	–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

1 to 10.5 Watt AC/DC encapsulated modules

OUTPUT VOLTAGE	OUTPUT CURRENT	OVP (4)	REGULATION		RIPPLE AND NOISE	CASE	AVAILABLE MODELS
			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	B3	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	B3	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	B3	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	B3	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	B3	PM593CE

Notes

1 Triple output models only: the 5V output common is isolated from the ±12VDC or ±15VDC common.
2 Some units should be derated for operation at 400Hz. Please contact the factory for details.
3 M.T.B.F. figures are based on actual product performance. Consult factory for details.
4 Triple output models only: overvoltage protection is only available on the 5V outputs.
5 All models are only for inclusion by professional installers within other equipment and must not be operated as a stand alone product.