

Advanced Power Solutions

7/30/2000

PCB-MOUNT UNIVERSAL INPUT AC-DC POWER SUPPLIES ENCAPSULATED MODULES 10-WATTS TRIPLE OUTPUT APS10AM-T SERIES



FEATURES:

- ON-BOARD AC/DC MODULAR POWER SUPPLIES
- UNIVERSAL INPUT RANGE
- COMPACT IN SIZE
- DESIGNED TO MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR PUB.22 / FCC CLASS B
- **CE MARKING COMPLIANCE**

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: 90-264Vac.(Or 110-340Vdc)

Input Frequency: 47-63 Hz. or DC

Input Current: 0.3A @115Vac./0.13A @230Vac

Inrush Current: 32.5A peak @230Vac

Input Fuse: Use external fuse. 1.0A/250Vac for the

primary fuse is suggested

Dielectric Withstand: Meet IEC950

3,000Vac-Output/Input 1,500Vac-Input/GND 500Vac-Output/GND

EMI: Meet CISPR PUB.22 / FCC class B Hold-up time: 20mS @115Vac, 80mS @230Vac Earth Leakage: Less than 3.5mA @230Vac

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart Output Current: See Rating Chart Output Wattage: Typ.10 Watts

Output Indicator: LED Line Regulation: ±0.5% typ.

Load Regulation: VO1/ VO3 $\pm 2.0\%$, V02 $\pm 5.0\%$ typ.

Noise & ripple: Typ. 1.0% peak to peak

OVP: Built-in on main output

Adjustability: From -10% of main output till OVP

Short Circuit Protection: Power fold back,

self-recovering

Overload Protection: About 130% of over-range

foldback type

GENERAL SPECIFICATION

Efficiency: Typ. 73%

Switching Frequency: 83KHz

Circuit Topology: Fixed Frequency Flyback circuit **Transient Response:** Output voltage returns in

less than 3mS following a

50% load change

Case: Impact resistant thermo-plastic enclosure

Weight: 120.0g (4.23Oz)

Power Density: 2.51 Watts./ Cubic inch Safety Standard: EN60950/ UL1950 Class I **Operating Temperature:** -25 to +71°C range

-10°C to +50°C without derating. Derating linearly 2.5%/°C from +50°C @F-L to +71°C @ H-L

(Refer to Derating Chart.)

Storage Temperature: -40°C to +85°C **Temperature Coefficient:** 0.02% /°C **Humidity:** Up to 95%RH, Non-condensing

Cooling: Convection cooling for +50°C @ full load
At least 100LFM moving air is recommended
for full load > +50°C in a confined area

Commercial Grade only

Note: (1) All measurements are at nominal input, full load, and +25°C unless otherwise specified.

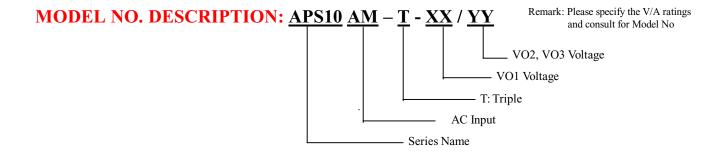
(2) Load Regulation measured from Full-Load(F-L) to Half-Load (H-L) at nominal input and others loaded at half load.











OUTPUT VOLTAGE/ CURRENT RATINGS CHART

TRIPLE OUTPUT

MODEL NO.	+VO1 @★			+VO2 †			-VO3 ¶		
	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.
APS10AM-T-5/09	1.0A	+5.0V	1.15A	0.27A	+9.0V	0.31A	0.27A	-9.0V	0.31A
APS10AM-T-5/12	1.0A	+5.0V	1.15A	0.25A	+12.0V	0.28A	0.25A	-12.0V	0.28A
APS10AM-T-5/15	1.0A	+5.0V	1.15A	0.20A	+15.0V	0.23A	0.20A	-15.0V	0.23A
APS10AM-T-5/24	1.0A	+5.0V	1.15A	0.12A	+24.0V	0.14A	0.12A	-24.0V	0.14A
APS10AM-T-3/05	1.0A	+3.3V	1.15A	0.40A	+5.0V	0.46A	0.40A	-5.0V	0.46A
APS10AM-T-3/12	1.0A	+3.3V	1.15A	0.25A	+12.0V	0.29A	0.25A	-12.0V	0.29A
APS10AM-T-3/15	1.0A	+3.3V	1.15A	0.20A	+15.0V	0.23A	0.20A	-15.0V	0.23A
APS10AM-T-3/5,12	1.0A	+3.3V	1.15A	0.40A	+5.0V	0.46A	0.25A	-12.0V	0.28A
APS10AM-T-3/24	1.0A	+3.3V	1.15A	0.12A	+24.0V	0.14A	0.12A	-24.0V	0.14A

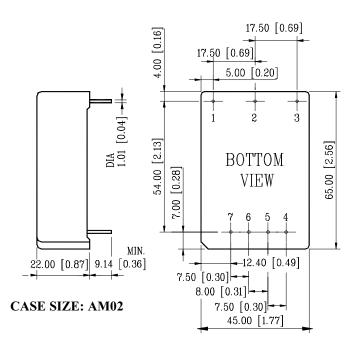
Symbols: "★" OVP built-in. "@" Adjustable. "¶" Double Feedback.

Note: (1). Max. (maximum load) is the continuous operating load of each rail,

But the max. load of each rail can not be drawn from all outputs at the same time.

(2). Peak output, less than 60 Sec. with duty cycle <10%.

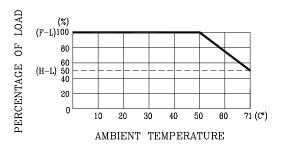
MECHANICAL DIMENSIONS: MM [INCHES]



PIN ASSIGNMENT

PIN NO.	TRIPLE
PIN #1	AC-GROUND
PIN #2	AC-NEUTRAL
PIN #3	AC-LINE
PIN #4	+ VO2
PIN #5	+ VO1
PIN #6	DC-COM
PIN #7	- VO3

DERATING CHART



Weight: 120.0g (4.23 Oz.)