



# Open Frame Dual Output 450 Watt Series

ATM450S - F X X X □

O / P Voltage ←

Blank : Open Frame

X : Enclosed Type Without Fan

Y : Enclosed Type With Top Fan

Z : Enclosed Type With Side Fan

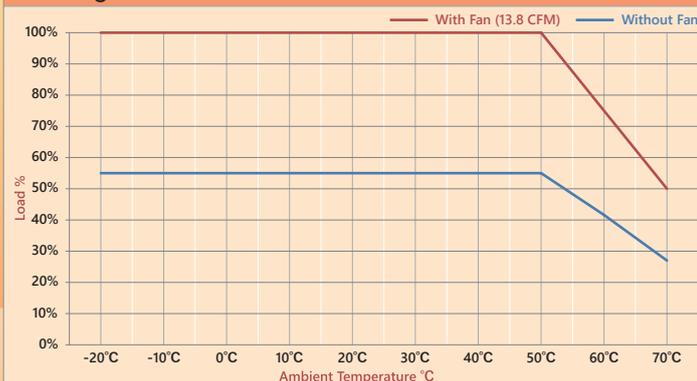
## Features :

- IEC/EN/ANSI/AAMI ES60601-1 (Edition 3.2)
- EMC : IEC60601-1-2 (Edition 4.1)
- Means of Protection : 2 X MOPP
- IEC/EN/UL 62368-1
- 100-240VAC Universal Input
- 450W With Fan
- Standby 5V / 1A
- On & Off Remote Control
- 12V / 0.6A Output for Fan
- Regulated Output With Low Ripple Noise
- Modified and Custom Design Available
- 2 Years Warranty

Model	O/P Voltage	O/P Current		O/P for Fan	Watt	
		Convection	With Fan*		Convection	With Fan*
ATM450S-F120□	12.0V	20.8A	37.5A	12V /0.6A	260W	462W
	5V	1.0A				
ATM450S-F150□	15.0V	16.6A	30.0A	12V /0.6A	260W	462W
	5V	1.0A				
ATM450S-F190□	19.0V	13.0A	23.7A	12V /0.6A	260W	462W
	5V	1.0A				
ATM450S-F240□	24.0V	10.4A	18.8A	12V /0.6A	260W	463W
	5V	1.0A				
ATM450S-F360□	36.0V	6.9A	12.5A	12V /0.6A	260W	462W
	5V	1.0A				
ATM450S-F480□	48.0V	5.2A	9.4A	12V /0.6A	260W	463W
	5V	1.0A				
ATM450S-F540□	54.0V	4.6A	8.3A	12V /0.6A	260W	460W
	5V	1.0A				
ATM450S-F560□	56.0V	4.5A	8.0A	12V /0.6A	260W	460W
	5V	1.0A				

\*With 13.8 CFM Fan

## Derating Curve



Input	
Voltage	100-240VAC
Line Frequency	50-60Hz
Current	5.3A-2.2A
Protection	Internal Primary Current Fuse

Output	
Load Regulation	±5% ( Typical )
Ripple & Noise	≤2% Vp-p @ Full Load
Transient(Dynamic) Response	0.5mS for 50% Load Change Typical
Start-up Time	< 3,000mS
Hold-up Time	≥ 10mS@ Full Load
Rise Time	< 50mS
Protection	Short Circuit Protection / Over Voltage Protection / Over Current Protection / Over Temperature Protection

Electrical	
Topology	LLC
Dielectric Withstand	4,000VAC Primary - Secondary
Touch Current(Patient) Leakage Current	< 100µA
Earth Leakage Current	< 5mA
MTBF	300,000 Calculated Hours at 25°C , by Telcordia SR-332

Environmental	
Operating Temperature	-20 to + 50°C
Storage Temperature	-20 to + 80°C
Operating Altitude	5,000M
Relative Humidity	Operating : 20 to 80% RH
	Storage : 10 to 90% RH
Cooling	250W with Convection Cooling
	450W with Forced Cooling

Mechanical	
Dimension	Open Frame : L 127 × W 76 × H 34 (mm) 5" x 3" x 1.34"
	Enclosed Type : L 127 × W 87 × H 50 (mm) (Top Fan) 5" x 3.43" x 1.97"
	Enclosed Type : L 148 × W 80 × H 41 (mm) (Side Fan) 5.83" x 3.15" x 1.62"
	Open Frame : 390g (Ref.)
Weight	Enclosed Type(Top Fan) : 570g (Ref.)
	Enclosed Type(Side Fan) : 660g (Ref.)