

PAC600S12-CE/CB Power Module



Introduction

PAC600S12 series cassette AC-DC power module have 90 to 290Vac wide input voltage, 12V and 3.3V dual outputs, total rating output power 600W. The module is configured with fan for cooling through a back-to-front airflow or the reverse direction. This series has two version, and the only difference is the airflow direction. Surge protection meet IEC61000-4-5 and ITU-TK.21 standard. Be suitable for switches, routers, access equipments, server, storage and so on, that need power supply of 12V.

Specification



Features

- Over current protection
- Short circuit protection
- Output overvoltage protection
- Over temperature protection
- I2C communication protocol
- Hot swap
- Suitable for the TT, TN, IT power supply system
- 1+1 redundant backup

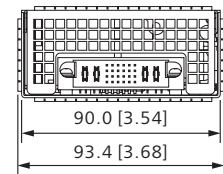
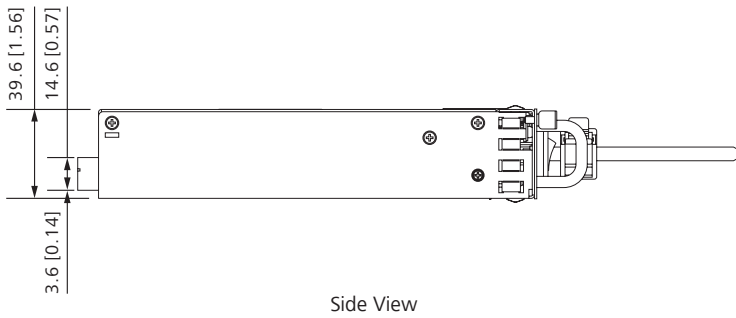
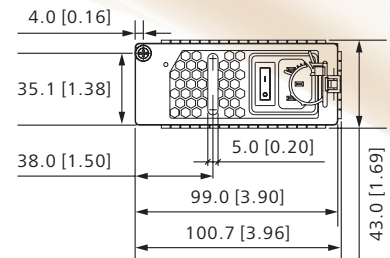
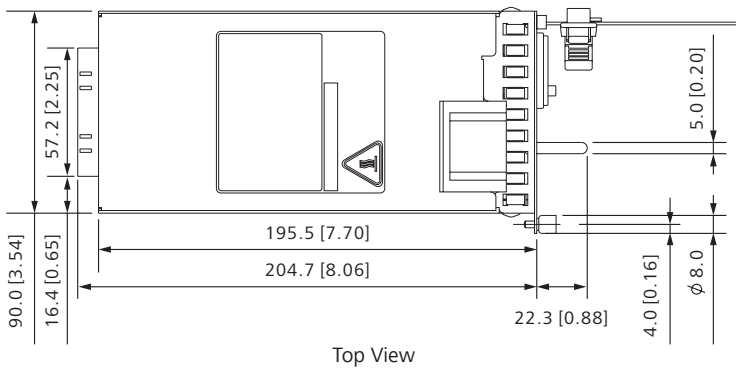
	Model	Parameter	Notes & Conditions
Output characteristics			
Output voltage range	ALL	11.64 ~ 12.36V 3 - 3.8 V	-
Output power	ALL	12V@600W	-
Output line regulation	ALL	2%Vo	Vin=90 - 264 VAC; Po=600W
Output load regulation	ALL	3%Vo	Vin=220 VAC; Po=0 - 600W
Output ripple and noise (PK-PK)	ALL	12V@200mV	Oscilloscope bandwidth: 20 MHz
Input characteristics			
Operating input voltage	ALL	90 - 290 VAC@50/60Hz	-
Maximum input current	ALL	7.8A	Vin=220 VAC; Po=600W
Power factor	ALL	≥0.95	Vin=220 VAC; Po=600W
Protection characteristics			
Input UVP	ALL	Turn on: 90V AC Turn off: 85V AC	Hysteresis: 5.0V
Output OVP	ALL	13.5 ~ 16V	Hiccup
Over current Protection	ALL	52 - 60A	Hiccup
Over temperature Protection	ALL	E: 70°C B: 60°C	Self-recovery
Absolute maximum ratings			
Operating ambient temperature	ALL	-25 - 55°C	-
Storage temperature	ALL	-40 - 85°C	-
Other characteristics			
I2C communication	ALL	Output voltage/current/power Electronic label (Rating output power, Device type, Device name)	-
Surge	ALL	Line to earth: ±6 kV Line to line: ±6 kV	IEC61000-4-5/ITU-TK.21
Mean time between failures (MTBF)	ALL	0.25 million hours	Telcordia SR332, Vin=220VAC, 100% load, TA=25°C

Model Selector

Model	Input Voltage	Output Voltage	Output Current	Output Power	Efficiency	Notes
PAC600S12-CE	90 - 290 Vac	12V/3.3V	50A/0.1A	600W	90.5%	E: back-to-front airflow
PAC600S12-CB	90 - 290 Vac	12V/3.3V	50A/0.1A	600W	90.5%	B: front-to-back airflow

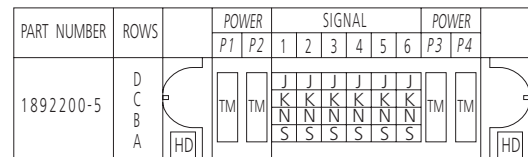
Mechanical Diagram

Unit: mm [in.]



Pin definition of output connector:

Pin	Definition	Description
P3	12V+	12V output
P4	12VGND	
D2	SHARE-12V	12V output current sharing signal, when two modules working in current sharing mode, this pin of each module should connect together
D3	PG-12V	Indicator whether the 12V output voltage is OK (H:OK, L:abnormal)
D4	3.3V	3.3V power supply from the main board, giving I2C chip power supply of module
D5	I ² C-SDA	I2C data signal
D6	I ² C-SCL	I2C clock signal
C4	A0	I2C E2PROM address0
C5	A1	I2C E2PROM address1
C6	PRESENT	To indicate to the system that the module is inserted in the power bay. This pin has been shorted to the 12VGND in the module
B2	Alarm	AC input power off or UVP alarm signal (H:OK, L:abnormal)
B3	3V3	Output: 3.3V/100mA
B4	WP	Write Protect: this pin should connected to 3.3V power supply from the main board, using 12VGND
B6	A2	I2C E2PROM address2
A3	SHARE-48V	48V output current sharing signal, when two modules working in current sharing mode, this pin of each module should connect together
A4	PG-48V	Indicator whether the 48V output voltage is OK (H:OK, L:abnormal)
A5	PSKILL	Hot swap signal, short pin, when this pin connect to the 12VGND by the back board, the module be enable
P2	48V-	48V output
P1	48V+(RTN)	



Output Connector

Input connector: IEC 60320 C14
Output connector: Tyco (1892200-5)

Tolerances
±0.5[0.02in.] (≤63[2.48])
±1.0[0.04in.] (>63[2.48])