

PAC500D5412-CE Power Module



Introduction

PAC500D5412-CE cassette AC-DC POE power module has 90 to 290Vac wide input voltage, -53V and 12V dual isolated outputs, total rating output power 500W (12V/120W; -53Vdc /380W). The module is configured with fan for cooling through a back-to-front airflow. Surge protection meet IEC61000-4-5 and ITU-TK.21 standard. Be suitable for switches, routers, access equipments and so on, that need dual power supply of 12V and 48V.

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

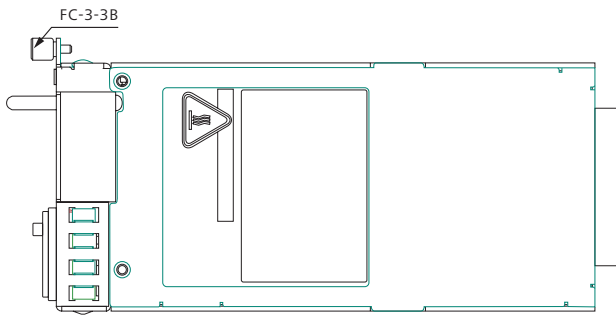
	Model	Parameter	Notes & Conditions
Output characteristics			
Output voltage range	PAC500D5412-CE	-51.89 ~ -55.11V 11.4 ~ 12.6V	-
Output power	PAC500D5412-CE	-53.5V@380W 12V@120W	-
Output line regulation	PAC500D5412-CE	1%Vo	Vin=90 - 264 VAC; Po=500W
Output load regulation	PAC500D5412-CE	3%Vo	Vin=220 VAC; Po=0 - 500W
Output ripple and noise (PK-PK)	PAC500D5412-CE	-53.5V@500mV 12V@200mV	Oscilloscope bandwidth: 20 MHz
Input characteristics			
Operating input voltage	PAC500D5412-CE	90 - 290 VAC@50/60Hz	-
Maximum input current	PAC500D5412-CE	6.3A	Vin=220 VAC; Po=500W
Power factor	PAC500D5412-CE	0.98	Vin=220 VAC; Po=500W
Protection characteristics			
Output OVP	PAC500D5412-CE	-57 ~ -60 V 13.4 ~ 15V	Latch off
Over current Protection	PAC500D5412-CE	-53.5V@8 - 10A 12V@12 - 16A	Hiccup
Over temperature Protection	PAC500D5412-CE	70°C	Self-recovery
Absolute maximum ratings			
Operating ambient temperature	PAC500D5412-CE	-25 - 55°C	-
Storage temperature	PAC500D5412-CE	-40 - 85°C	-
Other characteristics			
I2C communication	PAC500D5412-CE	Input voltage/current/power Output voltage/current/power Output OVP/UVP alarm	-
Surge	PAC500D5412-CE	Line to earth: ±6 kV Line to line: ±6 kV	IEC61000-4-5/ITU-TK.21
Mean time between failures (MTBF)	PAC500D5412-CE	0.25 million hours	Telcordia SR332, Vin=220VAC, 100% load, TA=25°C

Model Selector

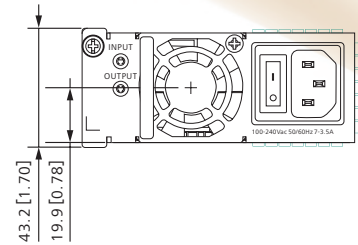
Model	Input Voltage	Output Voltage	Output Current	Output Power	Efficiency
PAC500D5412-CE	90 - 264 Vac	-53.5V/12V	7.1A/10A	500W	89.0%

Mechanical Diagram

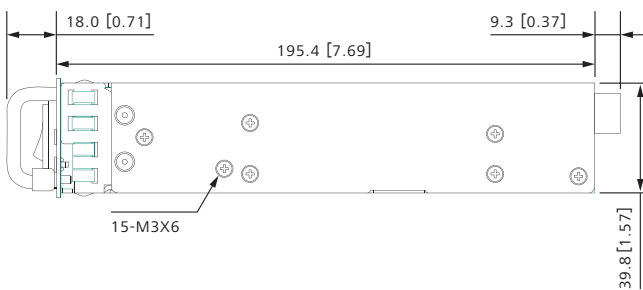
Unit: mm [in.]



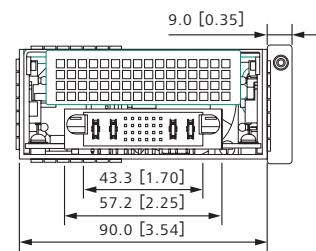
Top View



Front View



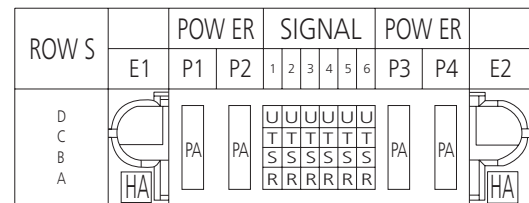
Side View



Back View

Pin definition of output socket:

Pin	Definition	Description
P3	12V+	12V output
P4	12VGND	12V output
D5	I ² C-SDA	I2C data signal
D6	I ² C-SCL	I2C clock signal
D4	3.3V	3.3V power supply from the main board, giving I2C chip power supply of the module
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
D3	PG-12V	Indicator whether the 12V output voltage is OK, using 12VGND (H:OK, L:abnormal)
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, using 12VGND (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)	48V output



Output Socket

Input connector: IEC 60320 C14
Output socket: JONHON (DP2TJW0424-007)
Mating connector: JONHON (DP2ZJB0424-001)

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