

PD Charger Wall Mount Series



Single Output 100W Data Sheet 3 Port

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Description

This specification defines the performance characteristics of single phase, 100 WATT, compatible USB-PD 3.0 and Quick Charge 2.0/3.0, 1 outputs power supply. This specification also defines worldwide safety and electromagnetic compatibility requirements for the power supply which is intended for use in IA products.

Features

- * Full AC input voltage range design.
- * Support for QC2.0, QC3.0 / PD3.0.
- * Full Protections: Short-circuit/ Over-voltage/ Over-current/ Over temperature.
- * Less than 300mW low standby power.
- * IEC/EN 62368-1 design compliance.
- * Up to 5000 meters operating altitude.
- * High power density and small size design.
- * AC plug is foldable.



Electrical Specification

Model Name	PA-3101-XXXX					
Output						
Rated power (Single mode)	100W					
Rated voltage (Port A or PortB)	5V	9V	12V	15V	20V	3.3~21V
Rated current (Port A or PortB)	3A	3A	3A	3A	5A	3A
Rated voltage (Port C)	5V	9V	12V	15V	20V	
Rated current (Port C)	3A	2.22A	1.67A	1.33A	1A	
Rated power (Dual mode)	95W					
Rated voltage (Port A)	5V	9V	12V	15V	20V	Total Power is 95W
Rated current (Port A)	3A	3A	3A (or 2.5A)	3A (or 2A)	3.25A (or 1.5A)	
Rated voltage (Port B)	5V	9V	12V	15V	20V	
Rated current (Port B)	3A	3A	2.5A (or 3A)	2.5A (or 3A)	1.5A (or 3.25A)	
Rated power (Dual mode)	85W					

Rated voltage (Port A or Port B)	5V	9V	12V	15V	20V	Total Power is 85W
Rated current (Port A or Port B)	3A	3A	3A	3A	3.25A	
Rated voltage (Port C)	5V	9V	12V	15V	20V	
Rated current (Port C)	3A	2.22A	1.67A	1.33A	1A	
Rated power (Triple mode)	100W					
Rated voltage (Port A)	5V	9V	12V	15V	20V	Total Power is 100W
Rated current (Port A)	3A	3A (or 2.22A)	3A (or 1.67A)	3A (or 1.33A)	3.25A (or 1A)	
Rated voltage (Port B)	5V	9V	12V	15V	20V	
Rated current (Port B)	3A	2.22A (or 3A)	1.67A (or 3A)	1.33A (or 3A)	1A (or 3.25A)	
Rated voltage (Port C)	5V	9V	12V	15V	20V	
Rated current (Port C)	3A	2.22A	1.67A	1.33A	1A	
Ripple & Noise(max.) (note #1)	380mV					
Line & load regulation	±5%					
Hold-up time(min.)	5ms/115Vac					
Timing: AC ON delay / rising (max.)	5 sec / 275ms					
Input						
Rated voltage range	100~240Vac					
Operated voltage range	90~264Vac					
Current range (max.)	2A					
Power factor (typ.)	>0.8					
Inrush current (typ.)	limited to a 29% margin of the I2t rating of fuse and bridge rectifier					
Frequency range	50-60Hz					
Leakage current (max.)	100uA at 250Vac					
Efficiency (typ.)	86.0%/100W					
Protection Function						
Over voltage (max.)	145% of rated voltage, latch-off protection					
Over current (max.)	7A , latch-off protection					
Short circuit at O/P	No damage, latch-off protection.					
Over temperature	No damage, latch-off protection					
Others						
MTBF (min.) (note#2)	100K hours @ rated load					
Environment						
Temperature	(operating) 0~35°C / (storage) -20~85°C					
Humidity	(operating) 10~95% RH non-condensing / (storage) 5~95% RH					
Altitude (max.)	5000 meters					

Mechanical	
Dimension	72(L)*72(W)*28.7mm(H) [T.B.D]
Temperature rise of case (note #3)	ΔT less than 50°C
Weight (typ.)	250g
Safety	
Standard	IEC/EN 60950-1, K60950-1, IEC/EN 62368-1, CNS14336-1
Withstand voltage	Input-Output: 4242VDC
Isolation resistance(min.)	Input-Output: 30Mohm @ 500VDC, 25°C, 70%RH
EMC	
EN55032 (CISPR32)	Conducted EMI: class B / Radiated EMI: class B
FCC	Conducted EMI: class B / Radiated EMI: class B
EN61000-3-2	Harmonic distortion: The power less than 75W and no limit apply
EN61000-4-2	ESD: ± 8 KV contact discharge / ± 15 KV contact discharge
EN61000-4-3	Radiated RF immunity: 3V/m
EN61000-4-4	EFT: ± 1 KV (AC port)
EN61000-4-5	Surge: ± 1 KV DM / ± 2 KV CM
EN61000-4-6	Conducted RF immunity: 3V/m
EN61000-4-8	Magnetic field immunity: 1A/m
EN61000-4-11	Voltage dip immunity: Criteria B

Notes

#1: Ripple noise is measured by a 1.5m length, twisted wires with 0.47uF MLCC & 10uF low ESR capacitor.

#2: Input voltage is 115Vac and 230Vac, output is rated load at 25°C.

#3: 100Vac and rated load at 35°C ambient temperature.

Mechanical Specification

