

PD Charger Wall Mount Series

Single Output 65W Data Sheet



For the latest revision, please visit power.liteon.com

Description

This specification defines the performance characteristics of single phase, 65 WATT, compatible USB-PD 3.0 and Quick Charge 2.0/3.0, 1-output 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.
- * Very low standby power, less than 75mW.
- * Very low leakage current.
- * IEC/EN 62368-1 design compliance.
- * Up to 5000 meters operating altitude.
- * Built-in 1.8m type C cable.



Electrical Specification

Model Name	PA-1650-55					
Output						
Rated power	65W					
Rated voltage	5V	9V	12V	15V	20V	3.3~21V
Rated current	3A	3A	3A	3A	3.25A	3A
Ripple & Noise(max.) (note #1)	380mV					
Line & load regulation	±5%					
Hold-up time(min.)	5ms/115Vac					
Timing: AC ON delay / rising (max.)	4 sec / 275ms					
Input						
Rated voltage range	100~240Vac					
Operated voltage range	90~264Vac					
Current range (max.)	1.7A					
Inrush current (typ.)	limited to a 22% margin of the I2t rating of fuse and bridge rectifier					
Frequency range	50-60Hz					
Leakage current (max.)	20uA at 240Vac					
Efficiency (min.) (note#2)	89.0%					

Protection Function	
Over voltage (max.)	150% of rated voltage, latch-off protection
Over current (max.)	4.2A, latch-off protection
Short circuit at O/P	No damage, latch-off protection.
Over temperature	No damage, latch-off protection
Others	
MTBF (min.) (note#3)	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	56(L)*56(W)*28.5mm(H)
Temperature rise of case (note #4)	ΔT less than 50°C
Weight (typ.)	180g
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	Not applicable
EN61000-4-2	ESD: ±8KV contact discharge / ±15KV contact discharge
EN61000-4-3	Radiated RF immunity: 3V/m
EN61000-4-4	EFT: ±1KV (AC port)
EN61000-4-5	Surge: ±1KV DM / ±2KV 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 with 0.47uF MLCC & 47uF low ESR capacitor at 20MHz bandwidth.

#2: It is average efficiency of 25%, 50%, 75% and 100% of rated load with Vo=20V, Vin=115/230Vac.

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

#4: 100Vac and rated load at 35°C ambient temperature.

Mechanical Specification

