

# FSP240-A3CR3

## FEATURES

- Meet USB PD R3.1
- Certified IEC 62368-1
- Meet Energy Efficiency DOE Level VI & VII (Draft)
- Meet Code of Conduct Version 5 Tier 2
- Over Current Protection
- Over Voltage Protection
- Short Circuit Protection
- Over Temperature Protection

## SAFETY STANDARD APPROVAL



## DESCRIPTION

This product is an 240 watts AC to DC PD desktop adapter intended for use in systems with Type-C input, such as e-Bike or robot applications. This adapter operates at 90 to 264 VAC input voltage with PD 3.1 standard outputs from 5V to 48V. The unit meets newest DOE level VI, EU 2025/2052 & GB 40943 standards.

## INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	100Vac, 240Vac / full load $\leq$ 3.0A
No load power consumption:	115Vac, 230Vac $\leq$ 0.1W
Touch current:	264Vac / 50Hz $\leq$ 0.25mA rms

## OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart
Max. output power:	240W
Protection:	
Over voltage:	The adapter will shut down caused by internal fault. That will be return to normal state by AC reset.
Over current:	The power will shutdown without damage.
Over Temperature:	The power supply will enter into shut down while the abnormal thermal rise occurs.

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	0~70°C (> 35°C derating )
Storage temperature:	-20~+85°C
Operating humidity:	10~85% RH non-condensing
Storage humidity:	10~95% RH non-condensing

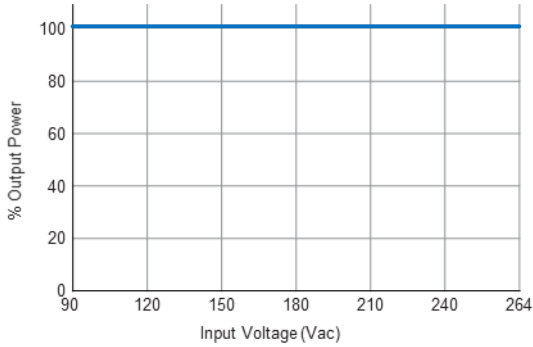
## GENERAL SPECIFICATIONS

Efficiency:	See the chart at next page
Hold-up time	$\geq$ 5ms at 100 or 240Vac with max. load
Operating altitude:	5,000 meters
Inrush current:	No damage, I <sup>2</sup> T Shall be less than 29% of the rating of adapter critical component
MTBF:	$\geq$ 100,000Hrs with 115Vac / Max. load at 35°

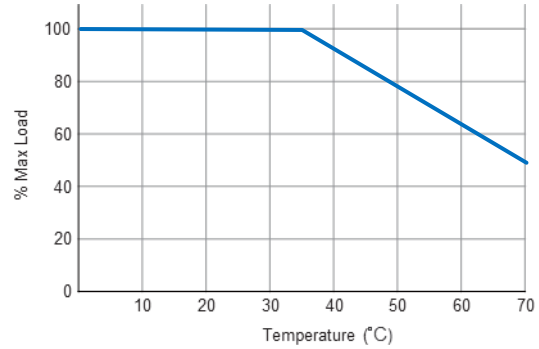
## EMC Performance

EN55032:	Class B conducted, class B radiated
FCC:	Part 15J class B
VCCI:	Level II
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, $\pm$ 15 KV air & $\pm$ 8 KV contact
EN61000-4-3:	Radiated immunity, 3 V/m
EN61000-4-4:	Fast transient / burst, $\pm$ 1 KV applied to L, N
EN61000-4-5:	Surge, $\pm$ 1 KV diff., $\pm$ 2 KV common mode
EN61000-4-6:	Conducted immunity, 3 Vrms
EN61000-4-8:	Magnetic field immunity, 1A/m
EN61000-4-11:	Voltage dip immunity, 30% reduction for 500 ms, >95% reduction for 10 ms, and 100% reduction for 5000 ms

INPUT VOLTAGE DERATING CURVE



OUTPUT POWER DERATING CURVE



OUTPUT VOLTAGE / CURRENT RATING CHART

Model	Output Voltage	Output Current	AC Inlet	Efficiency: DoE L6 & CoC V5 T2		Over Voltage Protection
				115V	230V	
FSP240-A3CR3	5/9/15/20/ 28/36/48V	3/3/3/5/ 5/5/5A	C8	SPR Mode	SPR Mode	5V: 7.5V Max. 9V: 12.6V Max. 15V: 21.0V Max. 20V: 26.0V Max. 28V: 33.6V Max. 36V: 43.2V Max. 48V: 55.0V Max.
				5V: 81.39% 9V: 86.62% 15V: 87.73% 20V: 88.00%	5V: 81.39% 9V: 86.62% 15V: 87.73% 20V: 88.00%	
EPR Mode	EPR Mode					
28V: 88.00% 36V: 88.00% 48V: 88.00%	28V: 88.00% 36V: 88.00% 48V: 88.00%					

MECHANICAL & AC CONNECTOR SPECIFICATIONS

Unit: mm

