

## TECHNICAL DATASHEET USB PD Type-C Adapter FSP045-A1UP3



# FSP045-A1UP3

### **FEATURES**

- · Certified IEC 62368-1 & CB 60950-1
- Meet Energy Efficiency DOE Level VI
- Meet Code of Conduct Version 5 Tier 2
- · High Reliability
- · Foldable USA AC plug

### SAFETY STANDARD APPROVAL



#### DESCRIPTION

This is a 45w USB PD adapter with compact design. It is compatible with USB type C smart phones, tablets, laptops and computers. It is automatically detect devices, providing the most efficient current and output.

#### **INPUT SPECIFICATIONS**

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Input voltage: Input frequency:	90-264 VAC 47-63 Hz	Power factor:	Provisions for adding harmonic reduction per EN 61000-3-2 must be present.
Input current:	100Vac, 240Vac / full load $\leq 1.5A$	Efficiency:	Meet DOE(Level VI)
No load power consumption	115Vac , 230Vac $\leq$ 0.1W when the USB	Power turn-on time Hold-up time:	At 100Vac / full load, output voltage shall remain regulation $\leq$ 3Sec At 100Vac or 240Vac / full load, output voltage shall remain
Touch current:	type-C plug out 264Vac / 50Hz $\leq 0.1$ mA	noid-up time.	regulation ≥5ms
rouch current.	$204$ vac / $30112 \equiv 0.111$ A	Inrush current:	100Vac, 240Vac / full load , Shall be less than the rating of adapter critical component (including rectifiers, fuse surge and current limiting device)
		Operating altitude:	5000 meters above sea level
OUTPUT SPECIFICATIO	ONS	Withstand voltage:	Between AC input and secondary applied DC 4242V,test time 1
Output voltage/current:	5V/3A ; 9V/3A ; 12V/3A ; 15/3A ;	MTBF:	minute, cut off current shall be less than 10mA
	20V/2.25A	WIBF:	100Vac, 240Vac / full load , 300,000 hours at 25°C, standard SR332
Total output power:	45W	EMC Performance:	01/002
Protection:		EN55032	Class B conducted, class B radiated
Over voltage:	The adapter will enter into shut down	FCC	Class B conducted, class B radiated
	that means no output while over voltage	VCCI	Class B conducted, class B radiated
	happened at output terminal that caused by internal fault, the output trip voltage	EN61000-3-2 EN61000-3-3	Meet class D
	shall not exceed 24 volts the power	EN61000-3-3 EN61000-4-2	Meet regulation Air discharge: ±15 KV.contact discharge: ±8KV, meet criterion A
	supply shall shut down and enter	LIN01000-4-2	80 ~1000 MHz,3V/m,80% AM(1kHz), meet criterion A
	auto-recovery mode.	EN61000-4-3	Impulse: ±1kV applied to L,N,meet criterion A
Short circuit &	When an internal fault occurs, or an	EN61000-4-4	±1kV applied differential mode, ±2kV applied common
Over current:	external fault is applied to the power	EN61000-4-5	mode, meet criterion A
	supply, such that an overload or short	EN61000-4-6	0.15 ~ 80 MHz,3Vrms,80% AM(1kHz),meet criterion A
	circuit is applied to the output, the	EN61000-4-8 EN61000-4-11	50 Hz or 60Hz,1A/m,meet criterion A
	power supply shall shut down and enter	EN01000-4-11	Voltage Dips : >95% reduction for 0.5 period,meet criterion B
	auto-recovery mode.		30% reduction for 25 period, meet criterion B
Over temperature:	The power supply will enter into shut		Voltage Interruptions :
	down while the abnormal thermal rise		>95% reduction for 250 period, meet criterion B
	occurs. the power supply shall shut	Power de-rating:	100Vac or 240Vac,0°C to 40°C,100% load.
	down and enter auto-recovery after the		
Brown-out	thermal goes normal. Set at 55Vac∼70Vac		
Drown out			

Environment Working TEMP. Storage TEMP. Working Humidity Storage Humidity

0~70°C (> 40°C de-rating )

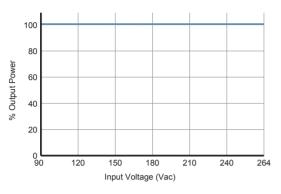
20~80% RH non-condensing 10~90% RH non-condensing

-20~+80°C

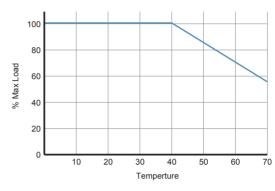


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#### INPUT VOLTAGE DERATING CURVE







#### **OUTPUT VOLTAGE/CURRENT RATING CHART**

Model	Output Voltage	Output Current	AC Inlet	Efficiency		Over Voltage
				DOE(Level VI)	CoC V5 (Tier 2)	Protection
FSP045-A1UP3	5/9/12/15/20V	3/3/3/3/2.25A	Foldable USA plug	≧88%	≧89%	24Volts



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## **MECHANICAL SPECIFICATIONS**

