



# FSP090-ABBU3

## FEATURES

- Certified IEC 62368-1 & CB 60950-1
- Meet USA EISA 2007
- Meet Energy Efficiency DOE Level VI
- Meet Code of Conduct Version 5 Tier 2
- High Reliability
- Low Profile
- Over Current Protection
- Over Temperature Protection
- Over Voltage Protection
- With PFC Circuit

## SAFETY STANDARD APPROVAL



## DESCRIPTION

This product is an 90 watts AC to DC adapter intended for use in IPC systems, embedded systems, printers, monitors, POS systems and PoE application, that have a high wattage demands. This adapter operates at 90 to 264 VAC input voltage. The unit meets CISPR32 EN55032 CLASS B, EN55024 and FCC PART 15B Class B emission limits, and is designed for ITE application.

## INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	100Vac, 240Vac / full load $\leq 1.2A$
No load power consumption:	115Vac , 230Vac $\leq 0.5W$
Touch current:	264Vac / 50Hz $\leq 0.25mA$

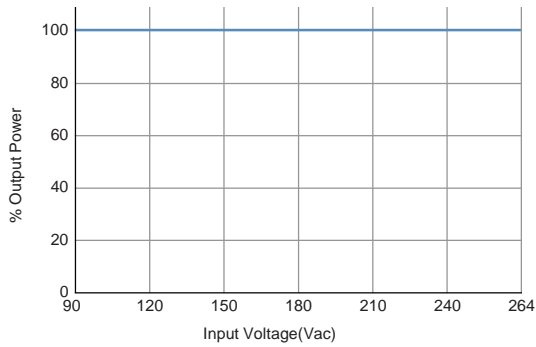
## OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart.
Total output power:	90W
Protection:	
Over voltage:	The adapter will enter into shut down that means no output while over voltage happened at output terminal that caused by internal fault, the output trip voltage shall not exceed 29 volts. That will be return to normal state by AC reset.
Short circuit & Over current:	When an internal fault occurs, or an external fault is applied to the power supply, such that an overload or short circuit is applied to the output, the power supply shall shut down and enter auto-recovery mode.
Over temperature:	The power supply will enter into shut down while the abnormal thermal rise occurs. That will be return to normal state by AC reset.
Brown-out:	Set at 60Vac~70Vac.
Environment:	
Working TEMP.:	0~70°C (> 40°C de-rating).
Storage TEMP.:	-20~+80°C
Working Humidity:	20~80% RH non-condensing.
Storage Humidity:	10~90% RH non-condensing.

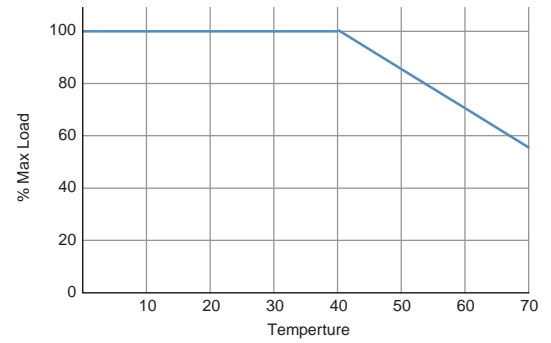
## IUTPUT SPECIFICATIONS

Power factor:	115Vac, 230Vac / full load $\geq 0.9$ Provisions for adding harmonic reduction per EN 61000-3-2 must be present.
Efficiency:	See rating chart.
Power turn-on time:	At 100Vac / full load, output voltage shall remain regulation $\leq 3$ Sec.
Hold-up time:	At 100Vac or 240Vac / full load, output voltage shall remain regulation $\geq 10ms$ .
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.
Withstand voltage:	Between AC input and secondary applied DC 4242V, test time 1 minute, cut off current shall be less than 10mA.
MTBF:	100Vac, 240Vac / full load, 300,000 hours at 25°C, standard SR332.
EMC Performance:	
EN55032	Class B conducted, class B radiated.
FCC VCCI	Class B conducted, class B radiated.
VCCI	Class B conducted, class B radiated.
EN61000-3-2	Meet class D.
EN61000-3-3	Meet regulation.
EN61000-4-2	Air discharge: $\pm 15KV$ , contact discharge: $\pm 8KV$ , meet criterion A.
EN61000-4-3	80~1000MHz, 3V/m, 80% AM(1kHz), meet criterion A.
EN61000-4-4	Impulse: $\pm 1kV$ applied to L,N, meet criterion A.
EN61000-4-5	$\pm 1kV$ applied differential mode, $\pm 2kV$ applied common mode meet criterion A.
EN61000-4-6	0.15~80 MHz, 3Vrms, 80% AM(1kHz), meet criterion A.
EN61000-4-8	50 Hz or 60Hz, 1A/m, meet criterion A.
EN61000-4-11	Voltage Dips : >95% reduction for 0.5 period, meet criterion B 30% reduction for 25 period, meet criterion C.
Power de-rating:	Voltage Interruptions : >95% reduction for 250 period, meet criterion C. 100Vac or 240Vac, 0°C to 40°C, 100% load, 50°C, 85% load, 60°C, 70% load, 70°C, 55% load (Shall be less than the rating of adapter critical component , follow FSP specification (adapter))

### INPUT VOLTAGE DERATING CURVE



### OUTPUT POWER DERATING CURVE



### OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output Voltage	Output Current	AC Inlet	Efficiency		Over Voltage Protection
				DOE(Level VI)	CoC V5(Tier 2)	
FSP090-ABBU3	19V	4.74A	C6	≥ 88%	≥ 89%	29 Volts
FSP120-ABBU3	19V	6.32A	C6			
FSP135-AJBU3	19.5V	6.93A	C6			

## MECHANICAL & AC CONNECTOR SPECIFICATIONS

FSP090-ABBU3 & FSP120-ABBU3 & FSP135-AJBU3

