



# FSP270-AxAN3 Series

## 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 a 240~270 watts AC to DC adapter intended for use in IPC systems, embedded systems, printers, monitors, Charging system and POS systems, 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 $\leq 0.25mA$

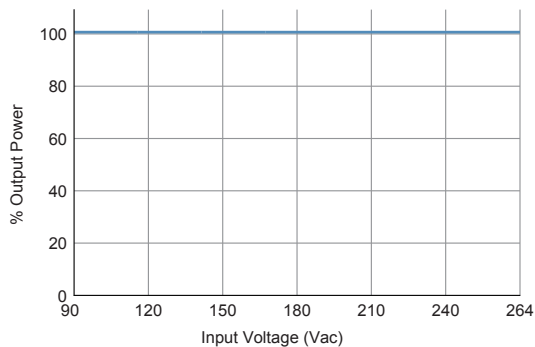
## OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart
Total output power:	See rating chart
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 29/37* 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

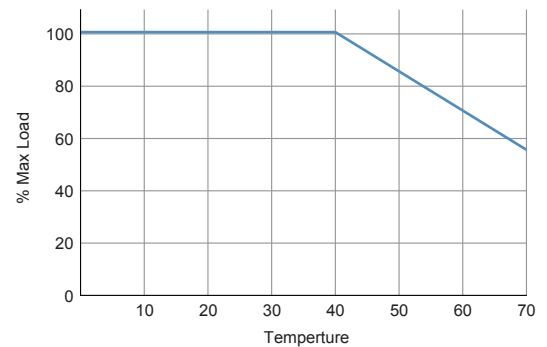
## INPUT SPECIFICATIONS

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 $\leq 3Sec$
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	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: $\pm 15$ KV, contact discharge: $\pm 8KV$ , meet criterion A
EN61000-4-3:	80~1000 MHz, 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, meet criterion A, $\pm 2kV$ 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 A 30% reduction for 25 period, meet criterion B Voltage Interruptions : >95% reduction for 250 period, meet criterion B
Power de-rating:	100Vac or 240Vac, 0°C to 40°C, 100% load, 50°C, 80% load, 60°C, 60% load, 70°C, 50% load (Shall be less than the rating of adapter critical component, follow FSP specification (adapter))

**INPUT VOLTAGE DERATING CURVE**



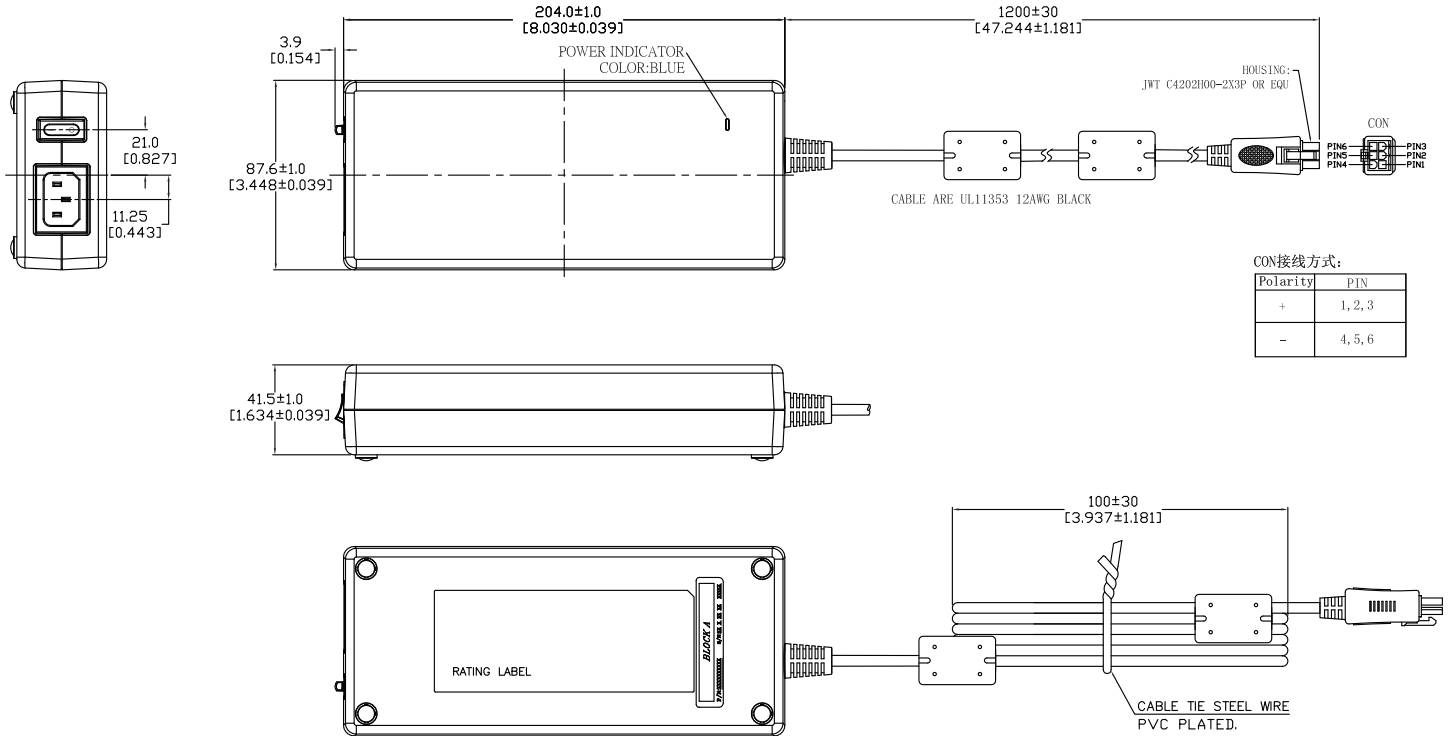
**OUTPUT POWER DERATING CURVE**



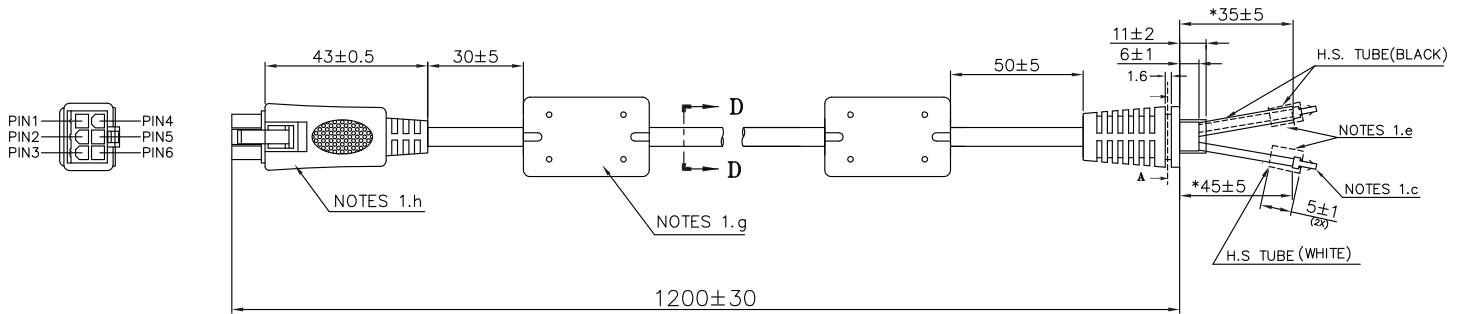
**OUTPUT VOLTAGE/CURRENT RATING CHART**

Model	Output Voltage	Output Current	Wattage	AC Inlet	Efficiency	
					DOE(Level VI)	CoC V5 (Tier 2)
FSP270-RHAN3	12V	20A	240W	C14	≥ 88%	≥ 89%
FSP270-RBAN3	19V	14.21A	270W	C14	≥ 88%	≥ 89%
FSP270-RAAN3	24V	11.25A	270W	C14	≥ 88%	≥ 89%
FSP270-RFAN3	48V	5.62A	270W	C14	≥ 88%	≥ 89%
FSP270-RWAN3	54V	5A	270W	C14	≥ 88%	≥ 89%

## MECHANICAL SPECIFICATIONS



## CONNECTOR SPECIFICATIONS



DIN PLUG	POLARITY	COLOR
PIN 1	V0(+)	WHITE
PIN 2		
PIN 3		
PIN 4		
PIN 5	GND(-)	BLACK
PIN 6		

