

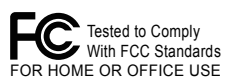
FSP192-AHA/BN3

FEATURES

- Certified CB 62368-1 & CB 60950-1
- Meet Energy Efficiency DOE Level VI
- Meet Code of Conduct Version 5 Tier 2
- High Reliability
- Slim Design
- Over Current Protection
- Over Temperature Protection
- Over Voltage Protection
- With PFC Circuit



SAFETY STANDARD APPROVAL



DESCRIPTION

This product is a 192W AC to DC adapter intended for IPC systems, embedded systems, printers, monitors, gaming laptops, POS systems, and AIO that have high wattage demands. This adapter operates from 90 to 264 Vac input voltage. The unit meets EN55032 Class B, EN55024 and FCC Class B emission limits, and is designed for ITE applications.

INPUT SPECIFICATIONS

Input voltage:	90-264Vac
Input frequency:	47-63Hz
Input current:	100Vac, 240Vac / full load ≤ 3A
No load power consumption:	115Vac, 230Vac ≤ 0.15W
Touch current:	264Vac / 50Hz ≤ 0.25mA

OUTPUT SPECIFICATIONS

Output voltage/current:	12V/16A
Total output power:	192W

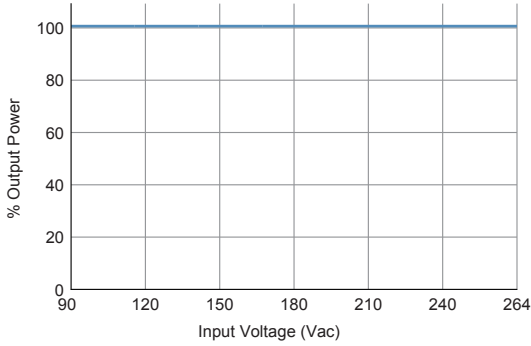
Protection

Over voltage:	The adapter shuts down when over voltage happens at output terminal caused by internal fault. The output trip voltage shall not exceed 18.4V. It can 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 shuts down when abnormal thermal rise occurs. It can return to normal state by AC reset.
Brown-out:	Set at 60Vac~70Vac
Environment	
Working temperature:	0~70°C (> 40°C de-rating)
Storage temperature:	-20~+80°C
Working humidity:	20~80% RH non-condensing
Storage humidity:	10~90% RH non-condensing

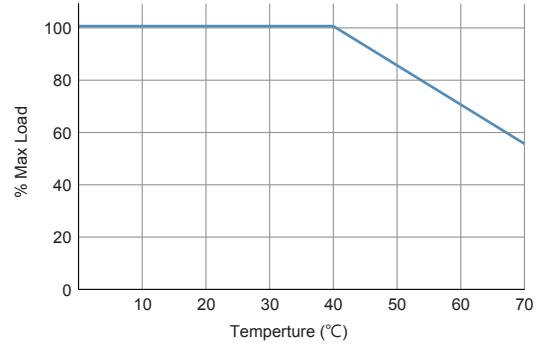
GENERAL SPECIFICATIONS

Power factor:	115Vac, 230Vac / full load ≥ 0.9 Provisions for adding harmonic reduction per EN 61000-3-2 must be present.
Efficiency:	DOE (Level VI) ≥ 88% CoC v5 (Tier 2) ≥ 89%
Power turn-on time:	At 100Vac / full load, output voltage shall remain regulated ≤ 3sec
Hold-up time:	At 100Vac or 240Vac / full load, output voltage shall remain regulated ≥ 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: ± 15 kV; contact discharge: ± 8 kV, meet criterion A
EN61000-4-3:	80 ~ 1000 MHz, 3V/m, 80% AM (1 kHz), meet criterion A
EN61000-4-4:	Impulse: ± 1kV applied to L, N, meet criterion A
EN61000-4-5:	± 1kV applied differential mode, ± 2kV applied common mode, meet criterion A
EN61000-4-6:	0.15 ~ 80 MHz, 3Vrms, 80% AM (1 kHz), 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 cycles, meet criterion B 30% reduction for 25 cycles, meet criterion C Voltage interruptions: > 95% reduction for 250 cycles, meet criterion C
Power de-rating:	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)

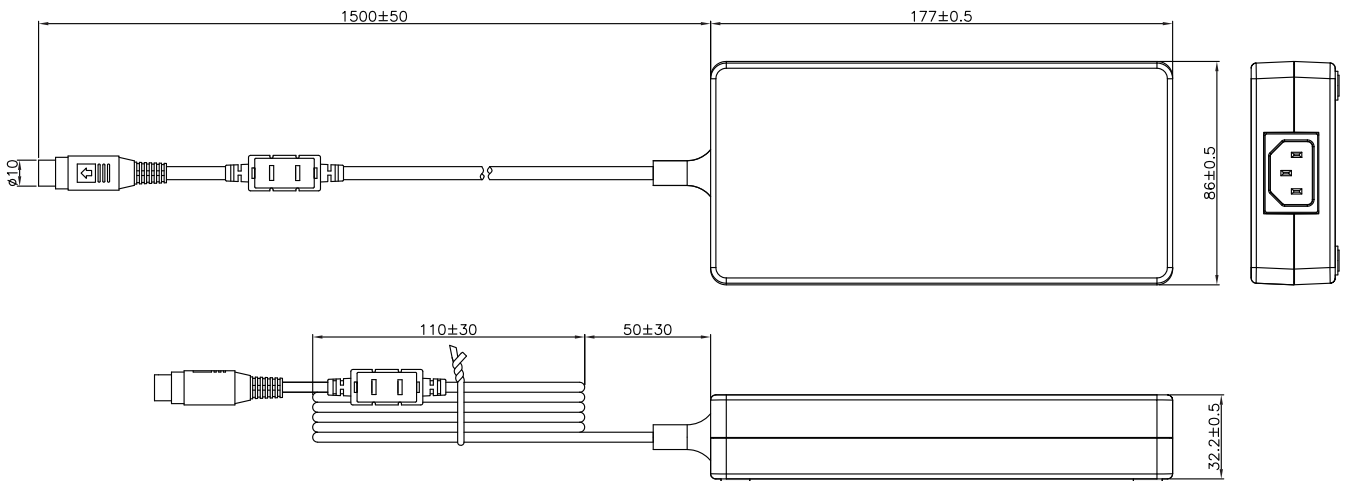
INPUT VOLTAGE DERATING CURVE



OUTPUT POWER DERATING CURVE

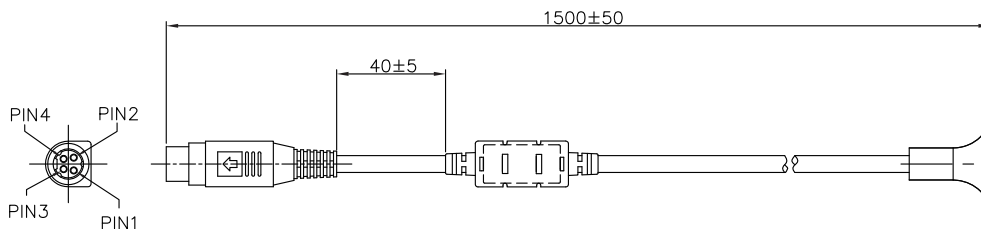


MECHANICAL SPECIFICATIONS



UNIT: mm

CONNECTOR SPECIFICATIONS



DIN PLUG	POLARITY	COLOR
P1	VO(+)	WHITE
P2		
SHIELD	GND(-)	BLACK
P3		
P4		

UNIT: mm