TECHNICAL DATASHEET

90W Adapter

FSP090-DBBN3

FSP090-DBBN3

FEATURES

- Meet IEC 62368-1 & IEC 60950-1
- Meet Energy Efficiency DOE Level VI
- Meet Code of Conduct Version 5 Tier 2
- High Reliability
- EMC Standard: EN55032/ EN55024 Class B
- Over Current Protection
- Over Temperature Protection
- Over Voltage Protection
- With PFC Circuit

SAFETY STANDARD APPROVAL

c UL us LISTED
I.T.E. POWER SUPPLY
E190414

TÜVRheinland ZERTIFIZIERT

Tested to Comply With FCC Standards
FOR HOME OR OFFICE USE

DESCRIPTION

This product is an watts AC to DC adapter intended for use in This product is an 90 watts AC to DC adapter intended for use in IPC systems, embedded systems, printers, monitors, POS systems, AIO, NB, PC Systems, Mini-ITX Systems, etc. 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 ≦ 1.5A
No load power consumption	115Vac , 230Vac ≦ 0.15W
Touch current:	264Vac / 50Hz ≦ 0.25mA

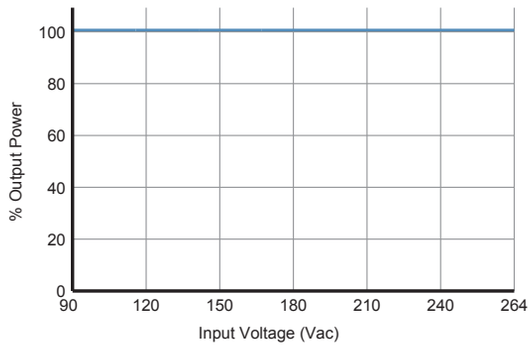
OUTPUT SPECIFICATIONS

Output voltage/current:	19V / 4.74A
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 28 vlots.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 output, the power suppy 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 ℃ (>=40℃ de-rating)
Storage TEMP.:	-20~+80℃
Working Humidity:	20~80% RH non-condensing
Storage Humidity:	10~90% RH non-condensing

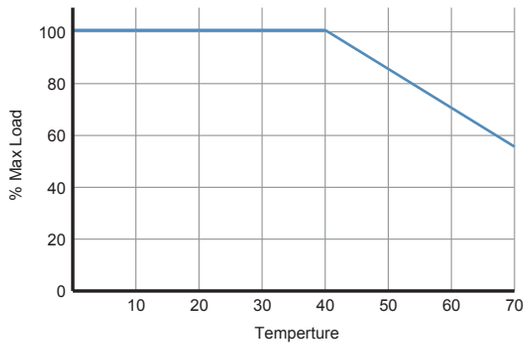
INPUT SPECIFICATIONS

Power factor:	115Vac, 230Vac / full load ≧ 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 ≦ 3.5Sec
Hold-up time:	At 100Vac or 240Vac / full load, output voltage shall remain regulation ≧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℃, 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: ± 8 KV,contact discharge: ±4KV, meet criterion A
EN61000-4-3	80 ~1000 MHz,3V/m,80% AM(1kHz), 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(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 Voltage Interruptions： >95% reduction for 250 period,meet criterion C
Power de-rating:	100Vac or 240Vac,0℃ to 40℃,100% load,50℃,85% load,60℃,70% load,70℃,55% load (Shall be less than the rating of adapter critical component , follow FSP specification (adapter))

INPUT VOLTAGE DERATING CURVE



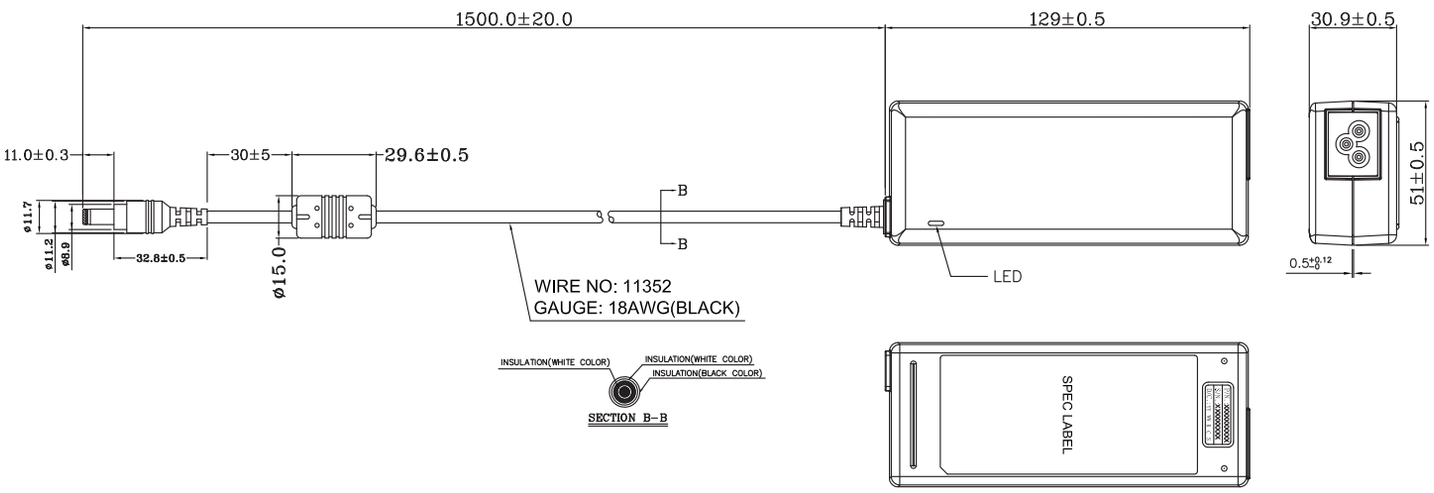
OUTPUT POWER DERATING CURVE



OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output Voltage	Output Current	AC Inlet	Efficiency		
				DOE(Level VI)	Erp(Tier 2)	CoC V5 (Tier 2)
FSP090-DBBN3	19V	4.74A	C6	≧88%	≧89%	≧89%

MECHANICAL SPECIFICATIONS



CONNECTOR SPECIFICATIONS