



# FSP040~48 RHAN3 Series

### FEATURES

- Certified IEC 62368-1 & CB 60950-1
- Peak current function
- 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 40~48 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 $\leq$ 1.5A
No load power consumption	115Vac, 230Vac $\leq$ 0.075W
Touch current:	264Vac / 50Hz $\leq$ 0.25mA

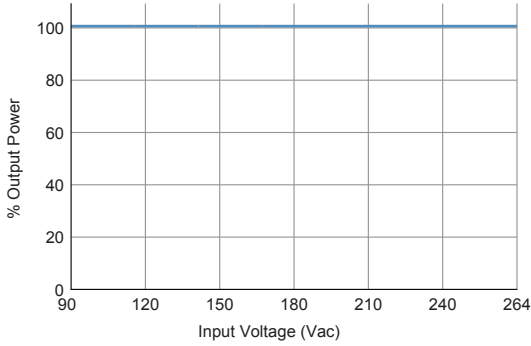
### OUTPUT SPECIFICATIONS

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 18 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 output, the power supply shall shut down and latch.
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	Shutdown and no damage
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

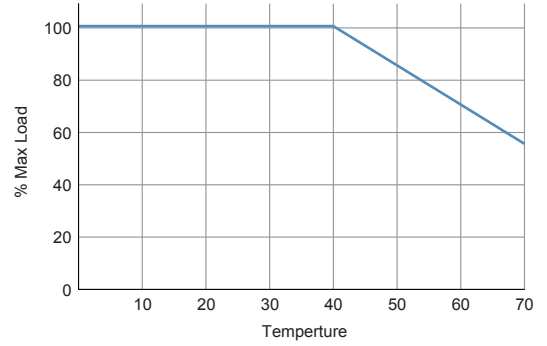
### INPUT SPECIFICATIONS

Power factor:	N/A
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 $\geq$ 5ms
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	N/A (<75W)
EN61000-3-3	Meet regulation
EN61000-4-2	Air discharge: $\pm$ 15KV, 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 B 30% reduction for 25 period, meet criterion C
Power de-rating:	
FSP040-RHAN3	>95% reduction for 250 period, meet criterion C
FSP042-RHAN3	100Vac or 240Vac, 0°C to 40°C, 100% load, 50°C, 100% load, 60°C, 100% load, 70°C, 80% load (Shall be less than the rating of adapter critical component, follow FSP specification (adapter))
FSP048-RHAN3	100Vac or 240Vac, 0°C to 40°C, 100% load, 50°C, 100% load, 60°C, 90% load, 70°C, 75% load (Shall be less than the rating of adapter critical component, follow FSP specification (adapter))

**INPUT VOLTAGE DERATING CURVE**



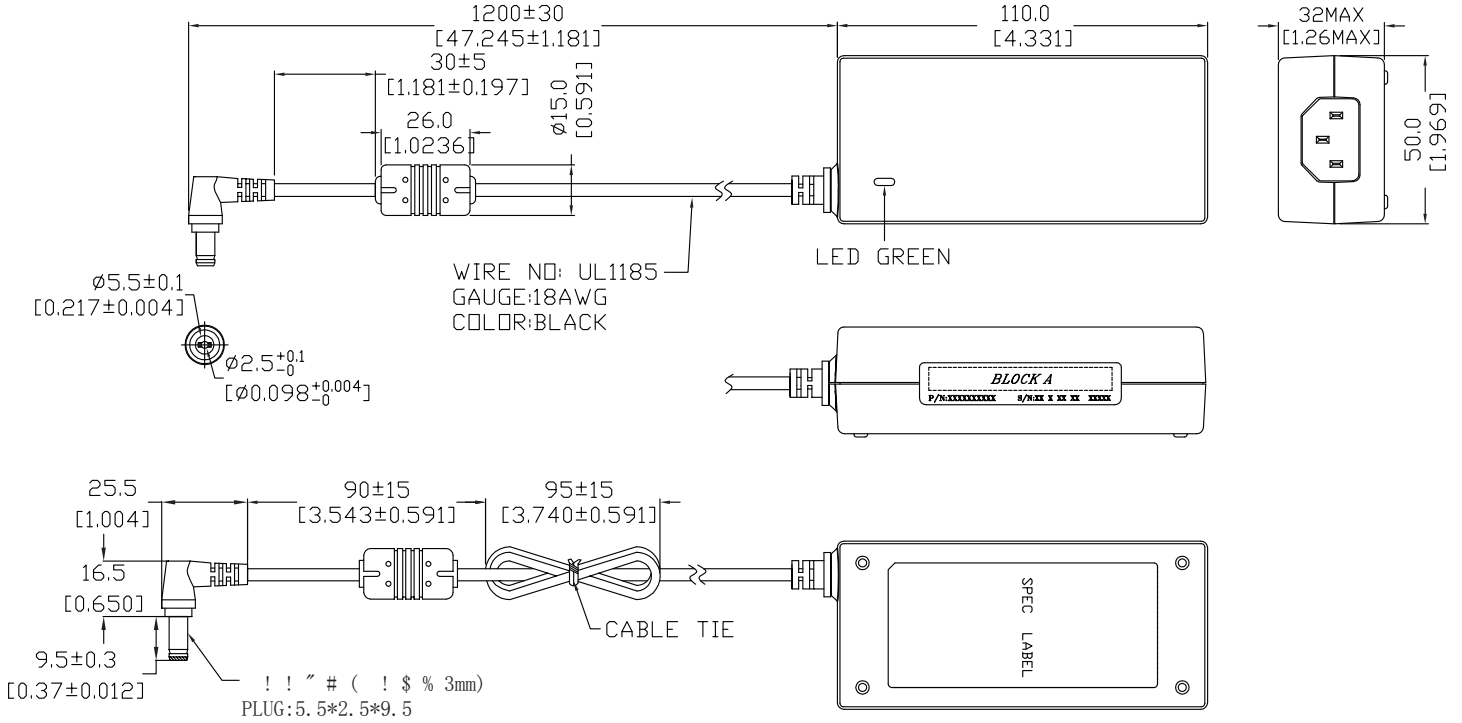
**OUTPUT POWER DERATING CURVE**



**OUTPUT VOLTAGE/CURRENT RATING CHART**

Model	Output Voltage	Output Current	AC Inlet	Efficiency	
				DOE(Level VI)	CoC V5 (Tier 2)
FSP040-RHAN3	12V	3.33A	C14	87.59%	88.59%
FSP042-RHAN3	12V	3.5A	C14	87.66%	88.71%
FSP048-RHAN3	12V	4A	C14	87.77%	88.97%

### MECHANICAL SPECIFICATIONS



### CONNECTOR SPECIFICATIONS

