

## In-line Switch Mode Supply Unit

T1235-021 - 48D Series

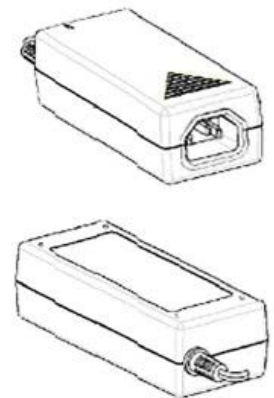
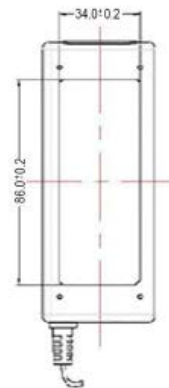
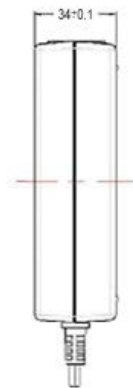
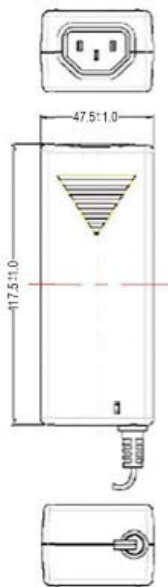


### FEATURES

- In-line light weight compact Switch Mode Power Supply Units with a wide 96V-264V AC input voltage range to suit travel product applications.
- Standard IEC-C14 inlet allows the correct IEC-C13 power cord to be selected for different countries.
- Electrical Safety Authority Approved.
- Other voltages and choice of output plug can be custom made upon request.

### DESIGN & CONSTRUCTION

**POWERMASTER**  
**SWITCH MODE  
POWER SUPPLY**  
MODEL: 48D120350P-14  
INPUT: 100 - 240V AC  
50 - 60Hz  
1.2 Amp  
OUTPUT: +12V DC  
3.5 Amp  
ELECTRICAL SAFETY  
CERTIFICATE SAA130273EA  
N692 N5071  
V  
11-55-21  
Made in China



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### INPUT

	MINIMUM	NORMAL	MAXIMUM
AC Input Voltage	90V AC	100 – 240V AC	264V AC
AC Input Frequency	47 Hz	50 / 60 Hz	63 Hz
AC Input Current - 230V AC (max)			1.2A
AC Inrush current* - 115V AC, 60Hz	No damage shall occur and the input fuse shall not blow		
AC Inrush current* - 230V AC, 50Hz	No damage shall occur and the input fuse shall not blow		
Primary current protection	An internal fuse on the AC input line is provided		
Configuration	IEC320 (C14) 3 conductors (Active, neutral, earth)		

### OUTPUT

Normal DC Output Voltage	+12.0V
Minimum Load Current	0.0A
Nominal Load Current	3.5A
Nominal Output Power	42W
Total Output Regulation	± 5%
Efficiency *	85.60% minimum
Line Regulation **	± 2%
Ripple & Noise	120mV P-P maximum
Over-current protection	7.0A maximum with auto-recovery function
Over-voltage protection	21V DC maximum
Short-circuit protection	No damage when shorting the DC output to ground
Open-circuit protection	When primary power is applied with no load on any output level, no damage or hazardous conditions should occur
Drop-out	With half cycle input voltage drop-out, the unit shall meet the regulation requirement and operate within the prescribed voltages with a drop-out pulse repetition rate of 500mS under full load and with normal AC input voltage

\* At 115/240VAC input voltage to meet GEMS Level V

\*\* At nominal input voltage and full load

\*\*\* At 20MHz and output parallel with 0.1uF & 10uF capacitors to ground

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### MECHANICAL

Dimensions	118.5(L) x 48.5(W) x 35.0(H) mm max
Weight	230g max
Input plug type	IEC-C14 3-pin 3-conductors (Active, neutral, earth)
Output cord	SPT-1, 18AWG/2C, 1828mm
Output plug	11.0(L) x 5.5(D) x 2.1(ID)mm

### ENVIRONMENTAL

Cooling	Natural convection
Operating temperature	0°C to +40°C
Storage temperature	-20°C to +80°C
Operating humidity	20 ~ 85% RH non-condensing
Storage humidity	5 ~ 95% RH non-condensing

### SAFETY

Dielectric withstanding voltage test (hi-pot test) input to output	Primary to Secondary	3,000V AC, 10mA, 1 minute OR 4,242V DC, 10mA, 1 minute
	Primary to Ground	1,500V AC, 10mA, 1 minute OR 2,124V DC, 10mA, 1 minute
Leakage current		3.5mA max at nominal AC input voltage and frequency
Operating humidity	Primary inlet F.G to secondary ground	32A for 2 minutes, 100mΩ max

### RELIABILITY

Mean time between failure (MTBF)	The power supply is designed to have a MTBF of 50,000 operating hours min. Conditions: 80% max load at 25°C
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