



# 12V/18W DoE VI Fixed Pin Adapter

AA18A-120E-R

● 12V/1.5A ● DoE VI & CoC V5 T2 ● No Y-cap, Low Leakage Current ● 1KV Surge



The 12V/1.5A adapter is the latest offering from a world leader in charging adapter technology and manufacturing - Phihong Technology. Phihong 12V/1.5A value adapter is designed to work with most 12V powered networking communication devices, such as Router, Switch, Set-Top Box (STB) and other 12V powered devices. Our 12V value adapter conforms to most of the industry standards and meets DoE level 6 and CoC V5 Tier 2 energy efficiency requirements, we ensure our products meet or exceed all the industry performance and safety requirements.

## Features :

Efficiency	DoE Level VI & CoC V5 Tier 2 (85.4%)
Power Saving	<0.075W @ no load
Protection	OVP, OCP, SCP
Over Voltage Protection	Output voltage<20.4V, auto restart
Over Current Protection	3A max, auto recovery
Short Circuit Protection	Auto recovery
Average Efficiency	>85.45%
10% Load Efficiency	>75.45%
Isolation	Primary to Secondary 3000Vac, 10mA for 1minute
Insulation	Primary to Secondary >10MΩ 500Vdc
Output Connector	DC Cord 1.5 meters 22AWG
Dimension (mm)	83.5*53.5*35.0

## Electrical Specifications :

Input Voltage	100~240Vac (90~264Vac min/max)
Frequency	50/60Hz Nom (47~63Hz min/max)
Input Current	0.5A (RMS) max @ 100Vac
Inrush Current	60A max @ 240Vac/50Hz
Output Voltage	12V,
Output Current	1.5A
Maximum Output Power	18W max
Output Ripple & Noise	240mV (pk-pk) @ max load
Output Voltage Regulation	11.4 – 12.6V @ 0A – 1.5A
Leakage Current	10uA max @240Vac
Turn-On Delay Time	<3 sec @ 90Vac/50Hz & max load
Hold-up Time	>10mS @ 115Vac/60Hz & max load
Rise Time	<100mS @ 115Vac/60Hz full load

## Environmental Specifications :

Operating Temperature	0°C ~ +40°C
Storage Temperature	-20°C ~ +70°C
Operating Relative Humidity	20% ~ 90% R.H.
Storage Relative Humidity	20% ~ 90% R.H.
Altitude	5000M
MTBF(MIL-HDBK-217)	>50K hours @100Vac & 240Vac, 25°C

## Safety and Compliance :

Safety	EN 60950-1
ESD	IEC/EN 61000-4-2 Contact discharges: +8KV, Performance Criterion B. Air discharges: +15KV, Performance Criterion B.
RS	IEC/EN 61000-4-3 80 – 1000 MHz, 3V/m, 80% AM, Performance Criterion A.
EFT	IEC/EN 61000-4-4; 1KV, 5/50 (Th/Tr ns), 5KHz, Performance Criterion B.
Lighting Surge	IEC/EN 61000-4-5; Line to Line: 1KV, Criterion B. Line to Earth: 2KV, Criterion B
CS	IEC/EN 61000-4-6 0.15 – 80 MHz, 3V, 80% AM, Performance Criterion A.
Immunity	IEC/EN 61000-4-8; 50 Hz, 1 A/m, Performance Criterion A
Voltage DIP	IEC/EN 61000-4-11
EMI Requirement	IEC/EN55022 & CISPR Class B; FCC Part 15B Class B

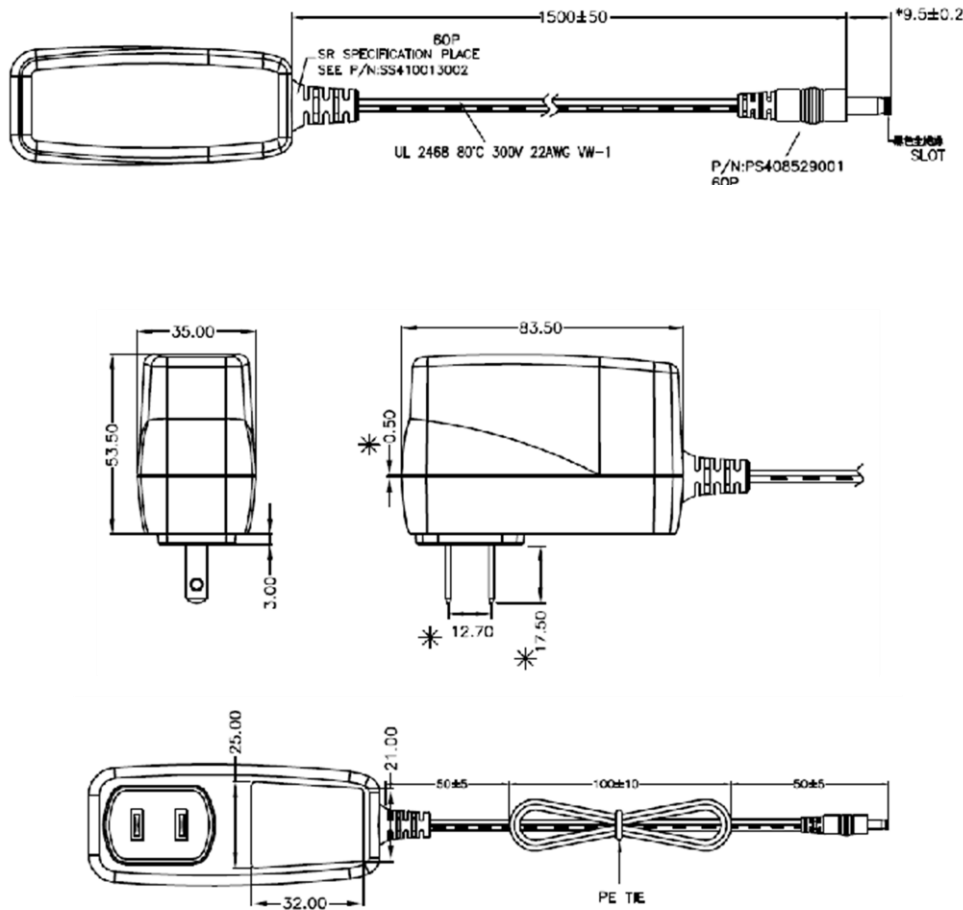


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### Dimensions: mm





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## Model Selections

Model Selections				
Model Number	Plug Type	Output Current (A $\pm 5\%$ )	Output Voltage (Vdc)	Max. Output Power (W)
AA18A-120E-R	US	1.5	12	18

More model selections with EC-Cap. Lifetime options and 120mV Ripple & Noise.

Type	Function
AA18A-120E-R	1. Ripple & Noise = 240mV 2. Surge = 1KV 3. EC-Cap. Lifetime = 3 years @ 25°C and 1 years @ 40°C
AA18A-120EA-R	1. Ripple & Noise = 240mV 2. Surge = 1KV 3. EC-Cap. Lifetime = 5 years @ 25°C and 3 years @ 40°C
AA18A-120EB-R	1. Ripple & Noise = 240mV 2. Surge = 1KV 3. EC-Cap. Lifetime = 7 years @ 25°C and 5 years @ 40°C
AA18A-120EC-R	1. Ripple & Noise = 240mV 2. Surge = 1KV 3. EC-Cap. Lifetime = 10 years @ 25°C and 7 years @ 40°C
AA18A-120ED-R	1. Ripple & Noise = 240mV 2. Surge = 1KV 3. EC-Cap. Lifetime = 10 years @ 40°C
AA18A-120EE-R	1. Ripple & Noise = 120mV 2. Surge = 1KV 2. EC-Cap. Lifetime = 3 years @ 25°C and 1 years @ 40°C
AA18A-120EF-R	1. Ripple & Noise = 120mV 2. Surge = 1KV 3. EC-Cap. Lifetime = 5 years @ 25°C and 3 years @ 40°C
AA18A-120EG-R	1. Ripple & Noise = 120mV 2. Surge = 1KV 3. EC-Cap. Lifetime = 7 years @ 25°C and 5 years @ 40°C
AA18A-120EH-R	1. Ripple & Noise = 120mV 2. Surge = 1KV 3. EC-Cap. Lifetime = 10 years @ 25°C and 7 years @ 40°C
AA18A-120EI-R	1. Ripple & Noise = 120mV 2. Surge = 1KV 3. EC-Cap. Lifetime = 10 years @ 40°C

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