



AMA18X-Y



Picture coming soon

Wall Mount Adaptor

The AMA18X-Y is a small wall mount type AC plug detachable adapter. Offering a commercial input voltage range of 90-264VAC and an output power of 18W. This adapter will offer many benefits to powering your new system such as low power consumption, high efficiency (meets ErP Tier 2 2016), meeting IEC60950-1 / IEC62368-1, FCC, Class B, CISPR22, Class B.

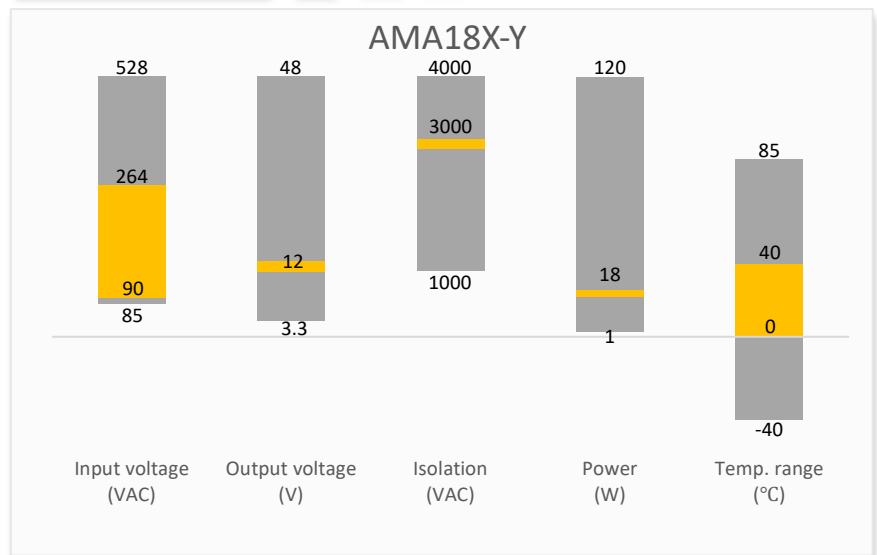
It also features an isolation of 3000VAC for improved reliability and system safety and comes standard with output short circuit protection (OSCP) and output over-current protection (OCP).

Features

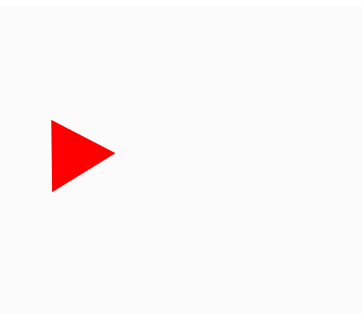


- Universal Input: 90 - 264VAC/47 - 63Hz
- Operating Temp: 0 °C to +40 °C
- High isolation voltage: 3000VAC
- Low ripple & noise, 200mV(p-p), max
- Output short circuit, over-current protection
- Regulated Output

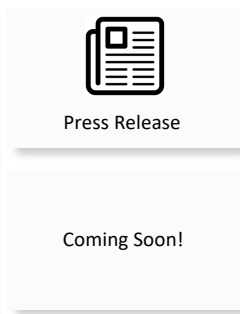
Summary



Training



Product Training Video
(click to open)



Application Notes

Applications



Portable Equipment

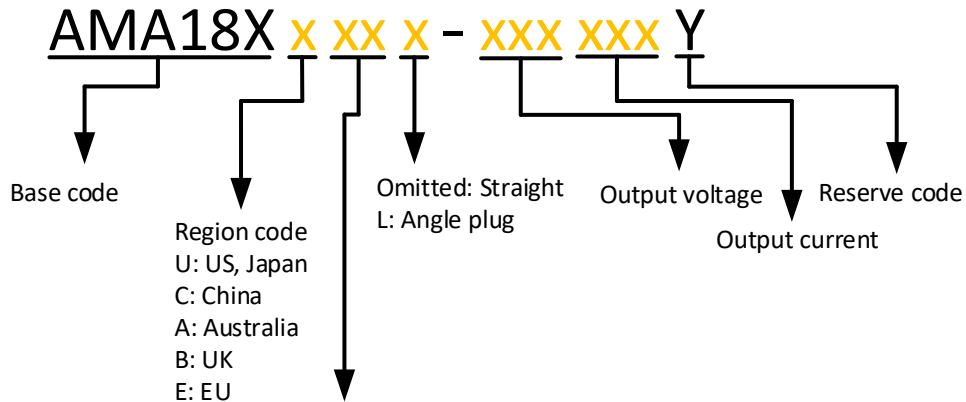


Industrial

Models & Specifications

| General Feature | | | | | |
|-----------------|--------------------|----------------------|------------------------|----------------------|----------------|
| Model | Input Voltage (VC) | Output Voltage (VDC) | Output Current max (A) | Output Power max (W) | Efficiency (%) |
| AMA18XU-120150Y | 90 - 264 | 12 | 1.5 | 18 | 85 |
| AMA18XE-120150Y | 90 - 264 | 12 | 1.5 | 18 | 85 |
| AMA18XA-120150Y | 90 - 264 | 12 | 1.5 | 18 | 85 |
| AMA18XB-120150Y | 90 - 264 | 12 | 1.5 | 18 | 85 |

Please refer to below coding rule for completed part numbers. Eg. AMA18XUR5-120150Y for industrial grade adaptor with US type plug which comes with 5.5mm*2.5mm*9.5mm straight standard output plug.



| Plug type | Code | O. D. | I. D. | Length |
|-----------|------|------------|--------|--------|
| Standard | R1 | 3.5mm | 1.35mm | 9.5mm |
| | R2 | 3.8mm | 1.05mm | 9.5mm |
| | R3 | 3.8mm | 1.35mm | 9.5mm |
| | R4 | 5.5mm | 2.1mm | 9.5mm |
| | R5 | 5.5mm | 2.5mm | 9.5mm |
| Locking | K1 | 5.5mm | 2.1mm | 9.5mm |
| | K2 | 5.5mm | 2.5mm | 9.5mm |
| USB | U1 | Micro USB | | |
| | U2 | USB type C | | |

| Input Specification | | | | | |
|---------------------|-----------------------------|---------|-----------|---------|-------|
| Parameters | Conditions | Minimum | Typical | Maximum | Units |
| Voltage range | | 90 | 100 - 240 | 264 | VAC |
| Frequency | | 47 | 50 - 60 | 63 | Hz |
| Input current | Vin at 100~240VAC | | | 0.5 | A |
| Inrush current | Vin at 240VAC, 12VDC output | | | 50 | A |
| Leakage Current | 240VAC/50Hz | | 0.25 | | mA |

| Output Specification | | | | | |
|----------------------|-------------------------------|---------|---------|---------|-------|
| Parameters | Conditions | Minimum | Typical | Maximum | Units |
| Output voltage | | | 12 | | VDC |
| Output current | | 0 | | 1.5 | A |
| Voltage regulation | | | | ±5 | % |
| Ripple and Noise | 20 MHz bandwidth | | | 200 | mVp-p |
| Start-up time | Full load, Vin at 230VAC/50Hz | | | 3 | S |
| Hold-up time | 90% load, Vin at 115VAC/60Hz | 10 | | | mS |

Ripple and Noise are measured at 20MHz bandwidth by using a 0.1uF (M/C) and 10uF (E/C) parallel capacitor.

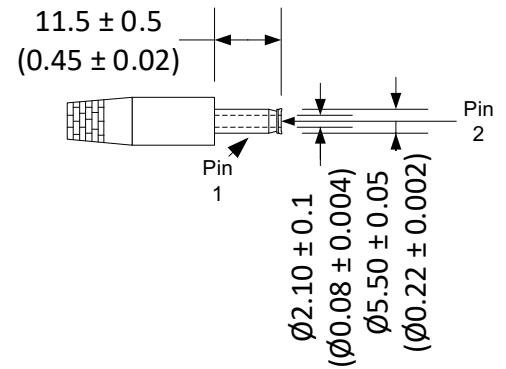
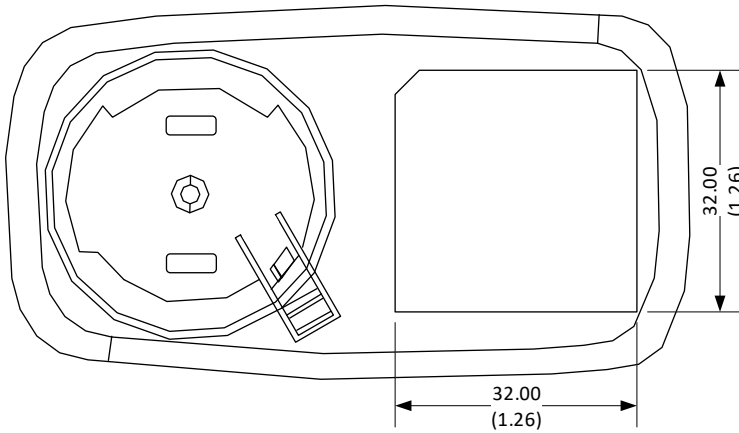
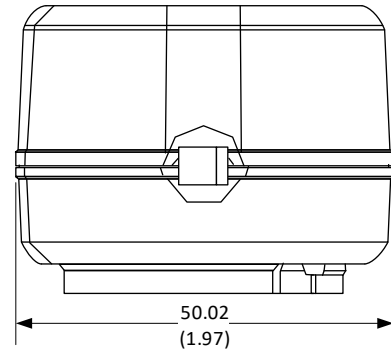
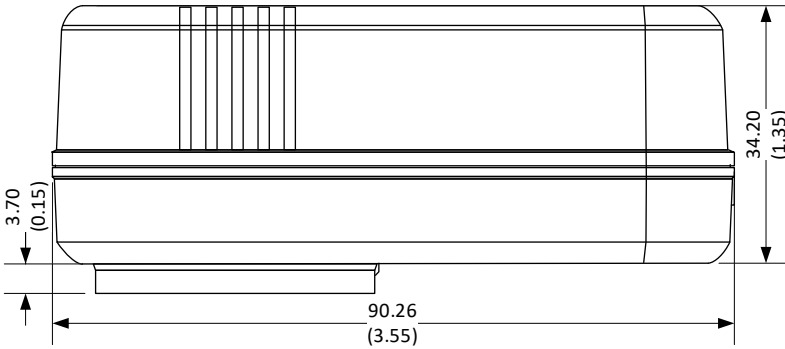
| Isolation Specifications | | | | |
|--------------------------|------------------------|---------|-------|-------|
| Parameters | Conditions | Typical | Rated | Units |
| Tested I/O voltage | leakage current < 10mA | | 3000 | VAC |
| Resistance | 500Vdc, 60s | | 50 | MΩ |

| General Specification | | | | | |
|--------------------------|--|---|---------|---------|-------|
| Parameters | Conditions | Minimum | Typical | Maximum | Units |
| Operating temperature | | 0 | | 40 | °C |
| Storage temperature | | -20 | | 70 | °C |
| Power consumption | Vin at 100 -240VAC , no load | | | 75 | mW |
| Humidity | Non-condensing | 20 | | 90 | % RH |
| Altitude | Operation | 0 | | 2000 | m |
| Efficiency standard | ErP Tier 2 (2016) | | | | |
| Short circuit protection | Continuous, auto recovery | | | | |
| Over current protection | Continuous, auto recovery | | | | |
| Dimensions (L x W x H) | Adaptor body | 3.55 x 1.97 x 1.49 inches (90.26 x 50.02 x 37.90mm) | | | |
| | US plug | Ø1.48 x 1.11 inches (Ø37 x 28.16mm) | | | |
| | EU plug | Ø1.48 x 1.90 inches (Ø37 x 48.36mm) | | | |
| | AUS plug | 3.55 x 1.66 x 2.87 inches (55.00 x 42.20 x 28.00mm) | | | |
| | UK plug | 2.00 x 1.95 x 1.17 inches (50.74 x 49.50 x 29.70mm) | | | |
| MTBF | > 175 000 hrs (SR332, t=+25°C)/Full Load | | | | |

All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

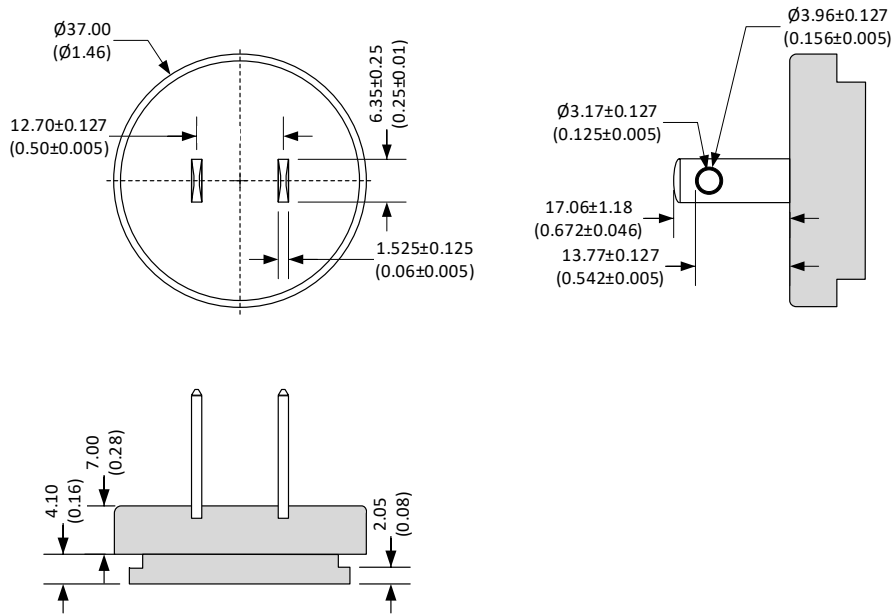
| Safety Specifications | | |
|-----------------------|-------------------------------------|-----------------------------------|
| Parameters | | |
| Standards | Information technology Equipment | Designed to meet IEC60950-1 |
| | EMC - Radiated & Conducted emission | FCC, Class B CISPR 22, Class B |

Dimensions

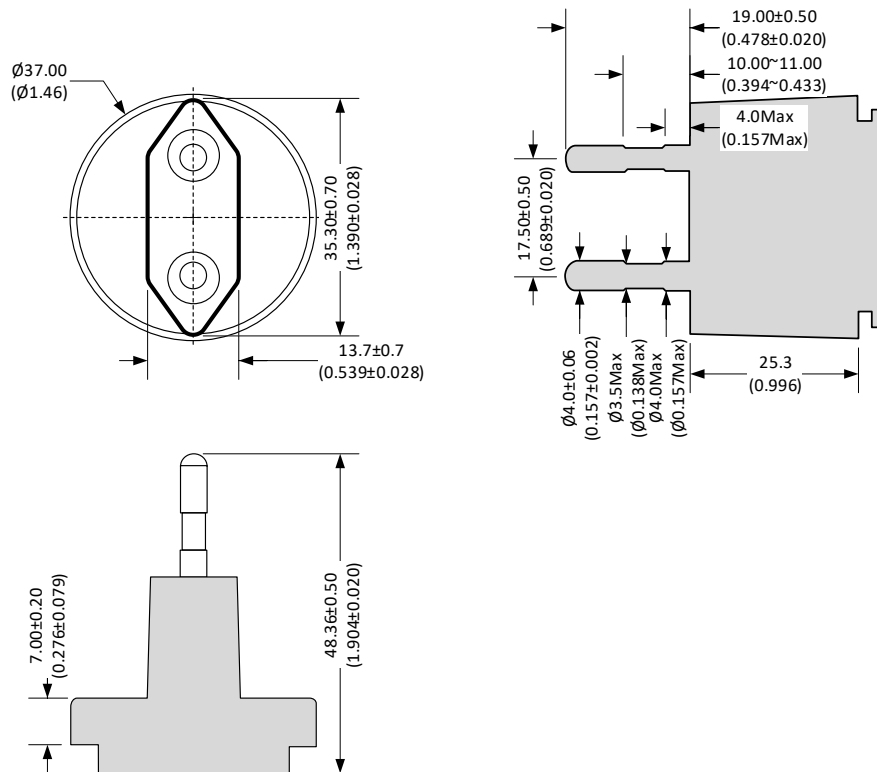


| Pin Output Specifications | |
|---------------------------|--------------|
| Pin | Output Level |
| 1 | RTN(-) |
| 2 | +Vout |

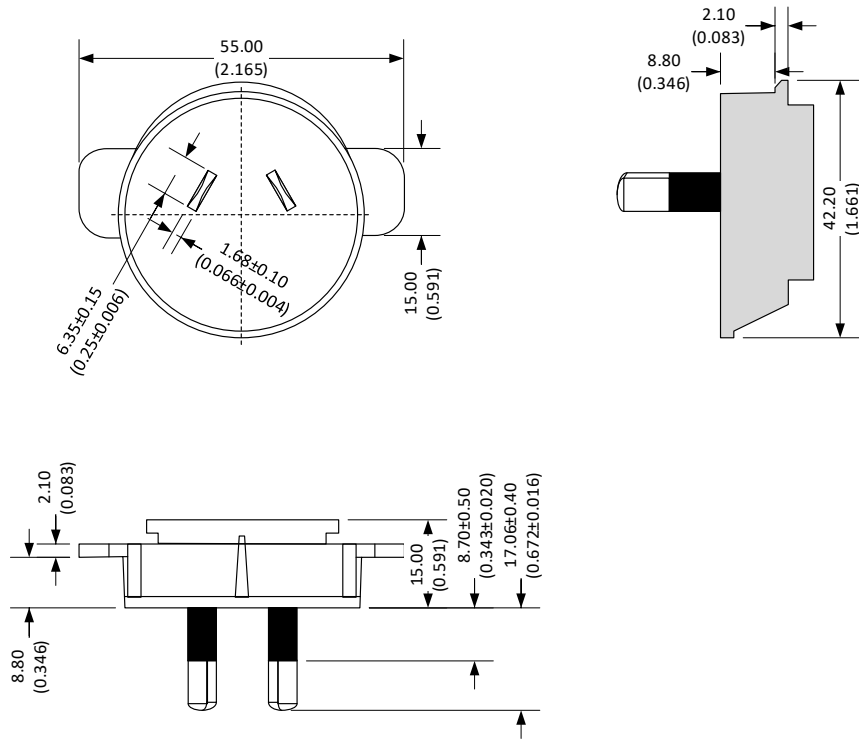
US Plug:



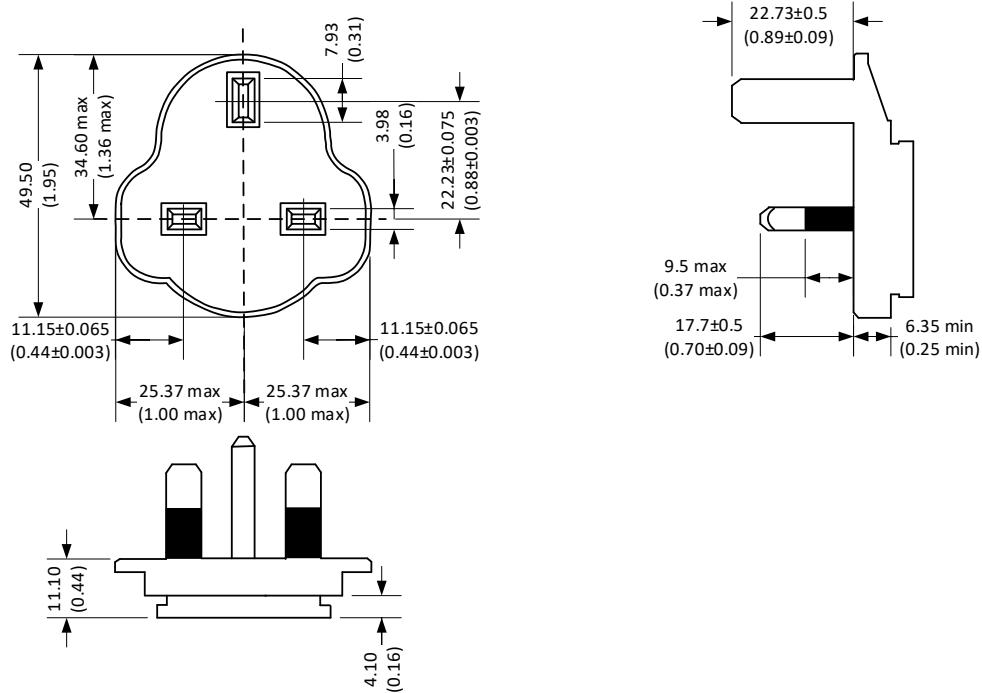
European Plug:



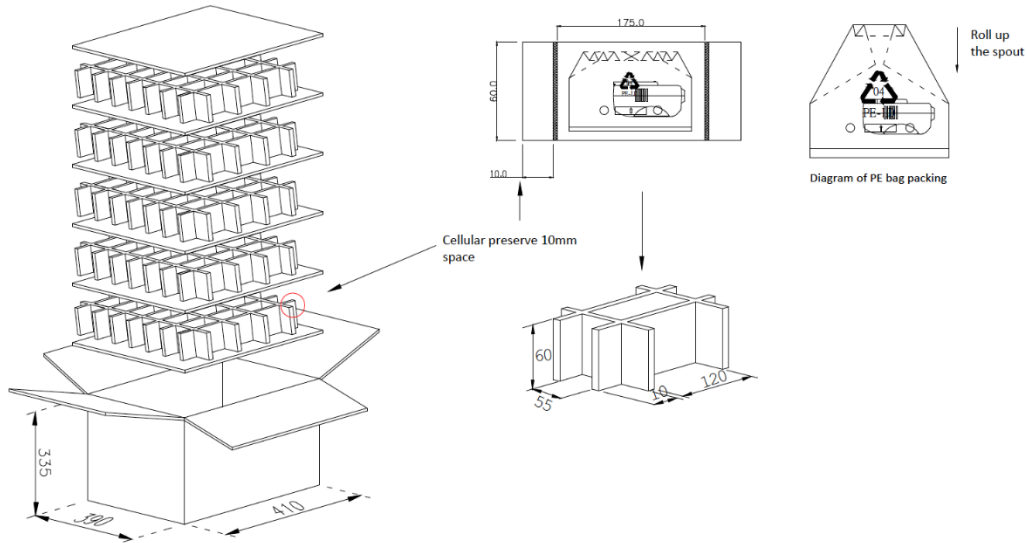
Australian Plug:



UK Plug:



Packing



Packing information:

- CARTON: L*W*H=(410*390*335)+/-5mm A=A
- CLAPBOARD: (392*371)+/-3mm B33 5PCS
- EGG CRATE: 392/120*371/55*60+/-3mm B33
- PLASTIC BAG: L*W=(220*155) +/-5mm; THICK: 0.06mm
- Q'TY: 18*5=90PCS
- UNIT: mm

NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. **2.** Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. **3.** Mechanical drawings and specifications are for reference only. **4.** All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. **5.** Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. **6.** This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other than the ones listed in this datasheet. **7.** Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com. **8.** Adaptors are intended for industrial use only.