

# AD Series **115/230Vac** Mains Power Supplies

## Mains Power Supplies in 12V, 24V and 48V Configurations

The AD Series units may be used to supply mobile radios and other appliances from AC mains used in offices, portable site cabins, communication cabins, telephone exchanges, remote antennae sites, ships, oil rigs etc. The units will accept either European 230Vac or US 115Vac inputs and are available as standard in 12V, 24V and 48V dc output configurations.

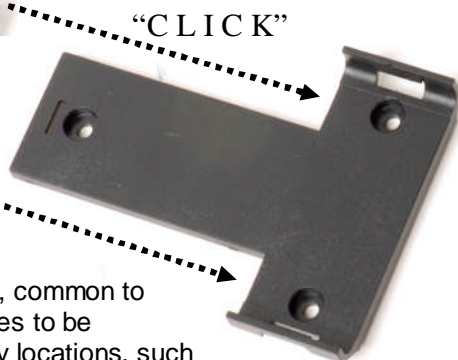
Input is via a standard IEC-320 C13/14 power cord with UK, European or US mains plugs – **please state your requirement.**



--FAST--

## Installation

There's nothing worse than a power supply lying around on the floor. The 'T' shaped mounting clip, common to many AlfaTRONIX products, allows the power supplies to be installed quickly and simply in many out of the way locations, such as underneath desks or on walls. The 3 point 'T' clip can be fitted securely, even on uneven surfaces, quickly and simply, then the power supply simply 'clips' in place.



The ever popular 'T' shaped bracket allows the power supply to be fitted quickly and simply making for a fast and neat installation.

## Rugged and Compact

These units, often referred to as 'brick in the lead' supplies are housed in a rugged, corrosion resistant anodized aluminium extrusion. The low mass surface mount technology components offer excellent resistance to shock and vibration, thus further increasing the reliability of these products.

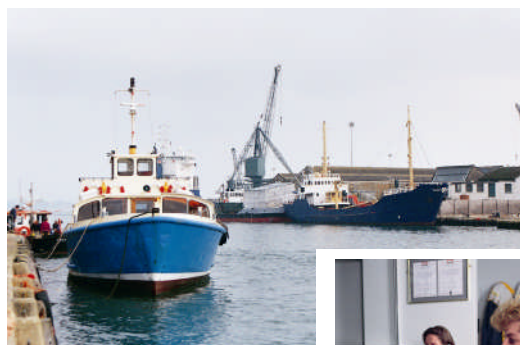
A red LED indicates when there is output from the converter. This gives reassurance to the installation engineer and speeds fault finding.



AD Series power supplies can also be fitted with DIN rail clips for rack mounted applications

## Battery Charging Required?

A fixed voltage battery charging facility is also available with the supplementary loom; P/N AD BB loom. For dedicated battery charging units, please check out our **IC Series – Intelligent Battery Chargers**



## Full Circuit Protection

The AD Series supplies have transient, overload and overheat protection for reliable operation even in the Toughest environments



AlfaTRONIX AD Series units are widely used throughout the world to provide reliable power supplies to radio repeaters for long range transmissions.

## Desktop Versions also available.

While the brick power supplies offer a versatile solution, if you are powering a mobile radio, try our **Desktop Versions**. These are configured to attach to the radio forming one dedicated unit and are available for a variety of radios including Motorola, Icom, Kenwood, Tait, Maxon and Vertex.

## Product Coding

The product code is developed as follows taking the AD 115/230-12 108 as an example:

<b>AD</b>	AC input and DC output
<b>115/230</b>	Denotes auto select US or European AC input voltage
<b>-12</b>	Nominal 12V output
<b>108</b>	108W Capacity Unit

# Choose your AD Series Product

P R O D U C T	Output Voltage			Power	Dimensions	Weight
	12Vdc	24Vdc	48Vdc			
	AD 115/230-12 036	AD 115/230-24 036	AD 115/230-48 036	36W	165 x 87 x 59mm	675g
	AD 115/230-12 072	AD 115/230-24 072	AD 115/230-48 072	72W	165 x 87 x 59mm	675g
	AD 115/230-12 108	AD 115/230-24 108	AD 115/230-48 108	108W	165 x 87 x 59mm	675g
	AD 115/230-12 168	AD 115/230-24 168	AD 115/230-48 168	168W	215 x 87 x 59mm	900g
	AD 115/230-12 240	AD 115/230-24 240	AD 115/230-48 240	240W	255 x 87 x 59mm	1150g

**Additional Loom for battery charging – P/N: AD BB Loom**

## Technical Data

Input voltage range	Auto-Select, 85-135Vac and 170-265Vac, 47-440Hz
Output voltage options	13.6Vdc, 27.2Vdc or 54.4Vdc, as ordered . Worst case limits are +/- 4%
Output noise	<50mV pk-pk at continuous load
Power Conversion Efficiency	Typically 85%
Isolation between input and case/output Isolation casework to ground	1.5kVac/3.0kVac rms  Connected directly to mains input ground
Normal operating temperature	-25°C to +30°C to meet this specification table +30°C to +70°C de-rate linearly to 0A
Storage Temperature	-25°C to +100°C
Max case temperature	70°C at full load with 25°C ambient
Operating humidity	95% max, non-condensing
Casework	Anodized aluminium
Connections: Input Output Ground	IEC-320 C14 socket, C13 terminated cordset 6.3mm push-on blade terminals Stud with crimp eyelet, adjacent to input
Output Indicator	Red LED adjacent to output terminals
Mounting Method	'Click 'n' Fit' mounting clip or rubber feet. DIN rails clips available as a special order
Safe area protection: Over Current Over heat Output over voltage Transients Catastrophic failure	Limited by current sensing circuit Limited by temperature sensing circuit Protected by independent shut down circuit Protected by filters and rugged component selection Protected by input and output fuses
Approvals	89/336/EEC The general EMC directive 73/23/EEC The low voltage directive 93/68/EEC The CE marking directive
Tested to	EN50081-1, EN50082-1, EN55014-1, EN61000-3-3, EN60950, EN60945, UL1950, CSA950-95, FCC Class "B", VDE0805
Markings	CE

For dedicated desktop versions to the same specification for a variety of mobile radios, please refer to our **AD Series Desktop Power Supply** leaflet.



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