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

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

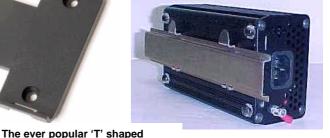
The AD Series units may be used to supply mobile radios and other appliances from AC mains used in offices, portable site cabins, communication cabins, telephone exchanges,

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.

## **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.



#### --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.



#### **Full Circuit** Protection

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

#### **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

CLICK'

Alfatronix AD Series units are widely used throughout the world to provide reliable power repeaters for long range

bracket allows the power supply

installation.

to be fitted quickly and simply

making for a fast and neat

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

#### **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:

AD	AC input and DC output		
115/230	Denotes auto select US or European		
	AC input voltage		
-12	2 Nominal 12V output		
108	108W Capacity Unit		



Power Conversion for Automotive, Communications and Marine Applications

# **Choose your AD Series Product**

	Output Voltage							
Р	12Vdc	24Vdc	48Vdc	Power	Dimensions	Weight		
R C O O	AD 115/230- <b>12</b> 036	AD 115/230- <b>24</b> 036	AD 115/230- <b>48</b> 036	36W	165 x 87 x 59mm	675g		
0 0 D D	AD 115/230- <b>12</b> 072	AD 115/230- <b>24</b> 072	AD 115/230 <b>-48</b> 072	72W	165 x 87 x 59mm	675g		
UE	AD 115/230- <b>12</b> 108	AD 115/230- <b>24</b> 108	AD 115/230 <b>-48</b> 108	108W	165 x 87 x 59mm	675g		
сs	AD 115/230- <b>12</b> 168	AD 115/230- <b>24</b> 168	AD 115/230 <b>-48</b> 168	168W	215 x 87 x 59mm	900g		
т	AD 115/230- <b>12</b> 240	AD 115/230- <b>24</b> 240	AD 115/230 <b>-48</b> 240	240W	255 x 87 x 59mm	1150g		
Additi	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		IEC-320 C14 socket, C13 terminated cordset			
Output		6.3mm push-on blade terminals			
Ground		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	Limited by current sensing circuit			
	Over heat	Limited by temperature sensing circuit			
	Output over voltage Transients	Protected by independent shut down circuit Protected by filters and rugged component selection			
	Catastrophic failure	Protected by input and output fuses			
Approvals		2004/108/EC The general EMC directive			
		2006/95/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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