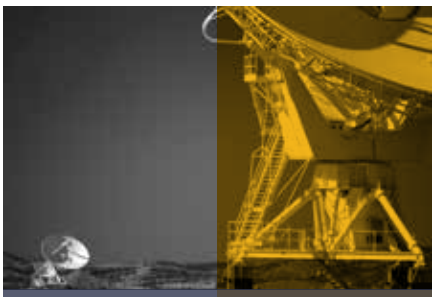
AD SERIES
115/230VAC MAINS POWER SUPPLIES

MAINS POWER SUPPLIES IN 12V, 24V & 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 output configurations. Input is via a standard IEC-320 C13/14 power cord with UK, European or US mains plugs - *please state your requirement*.



AD Series Power supplies can also be fitted with DIN rail clips for rack mounted applications: *see page 24*.

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, and then the power supply simply 'clips' in place.

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 (page 12)*.

FULL CIRCUIT PROTECTION

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

RUGGED AND COMPACT

These units, often referred to as 'brick in the lead' supplies are housed in a rugged, corrosion resistant anodised 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 green LED indicates when there is output from the converter. This gives reassurance to the installation engineer and speeds fault finding.

DESKTOP VERSIONS ALSO AVAILABLE

While the brick power supplies offer a versatile solution, if you are powering a mobile radio, try our *Desktop Versions (page 18)*. These are configured to attach to the radio forming one dedicated unit and are available for a variety of radios including Motorola, Hytera, Tait, Kenwood, Icom, Maxon and Vertex.

PRODUCT CODING

The product code is derived 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	Nominal 12Vdc output
108	108W capacity unit

CHOOSE YOUR AD SERIES PRODUCT

	Output Voltage					
	12Vdc	24Vdc	48Vdc	Power	Dimensions	Weight
Product Codes	AD 115/230-**12** 036	AD 115/230-**24** 036	AD 115/230-**48** 036	36W	174 x 87 x 62mm	675g
	AD 115/230-**12** 072	AD 115/230-**24** 072	AD 115/230-**48** 072	72W	174 x 87 x 62mm	675g
	AD 115/230-**12** 108	AD 115/230-**24** 108	AD 115/230-**48** 108	108W	174 x 87 x 62mm	675g
	AD 115/230-**12** 168	AD 115/230-**24** 168	AD 115/230-**48** 168	168W	225 x 87 x 62mm	900g
	AD 115/230-**12** 240	AD 115/230-**24** 240	AD 115/230-**48** 240	240W	264 x 87 x 62mm	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 (100mV on 24V versions, 200mV on 48V versions)
Power Conversion Efficiency	Typically 83%
Isolation between input and case/output Isolation between 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
Connections: Input Output Ground	IEC-320 C14 socket, C13 terminated cordset 6.3mm push-on blade terminals Stud with crimp eyelet, adjacent to input (additional external ground if required)
Output indicator	Green LED adjacent to output terminals
Mounting method	'Click 'n' fit' mounting clip or rubber feet. DIN rail clips available if required (*see page 24*).
Safe area protection: Over current Over heat Transients Catastrophic protection	Limited by current sensing circuit Limited by temperature sensing circuit Protected by filters and rugged component selection Protected by internal 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
Designed to	EN60950, EN55022, EN61204-3
Markings	CE