# AD Series "The Wedge" Desktop Power Supplies

### **Desktop Power Supplies**

The Desktop Power Supplies, popularly called the "Wedge" due to its distinctive ergonomically friendly shape, offer a convenient way to convert 12Vdc mobile radio transceivers for use as desktop base stations. They will operate from AC supplies, either 115V or 230V without manual adjustment. The products are available in two current ratings: 108W (9A) sufficient for most radio transceivers or HP14 168W (14A) for higher power radios.



#### **Integrated Battery Back Up Facility**

The product has a built in battery back up facility which will allow the supply to continuously trickle charge a battery which will automatically power the transceiver in the event of a mains supply cut.



#### Now available in new powerful 14Amp Version

While the standard 9 Amp wedge is ideal for most European applications, many of the radio manufacturers also make more powerful radios for export markets where higher power radios are permitted. To satisfy this demand, we have now produced a new more powerful version, capable of supplying 14 Amps continuous power for radios in transmit mode. The physical dimensions remain the same, but with upgraded electronic power components. The part numbers also remain the same, but please add the suffix **HP14** to the end of the part number.



Alfatronix Desktop "wedge" power supplies are configured to suit a wide range of radio transceivers from many manufacturers - see list overleaf. However, if you use a variety of radio types or cannot find a compatible unit, try our UNIVERSAL unit, P/N AD UN UNI. This uses a mechanical interlocking fixing system (3M "Dual Lock") to fix the transceiver securely to the power supply.

#### **Product Coding**

The product codes are developed to be as intuitive as possible. Taking the Motorola AD MT CM HP14 as an example: AD denotes the Alfatronix AD Series MT denotes the radio manufacturer (Motorola)

CM denotes a popular radio compatible with this unit. HP14 denotes that the high power version is required

AD	Alfatronix AD Series			
MT	Denotes the radio manufacturer. In			
	this case Motorola			
CM	Denotes a popular radio compatible			
	with this unit.			
HP14	Only add HP14 if the 14A version is			
	required. Otherwise leave blank			
Please note: Like most part numbers, the CM				

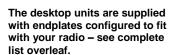
overleaf for a complete list.

fits a range of radios, not just the CM. See

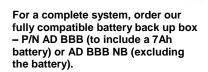


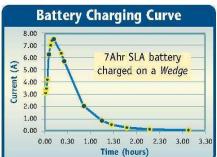
these for Motorola radios

9 years ago, now we









## **Choose your Wedge Desktop Power Supply**

Manufacturer	Order these Part numbers				
	from Alfatronix	to fit these transceiver varieties			
Motorola	AD MT-3100/DM	PRO3100, PRO5100, PRO7100, GM340, GM640, GM350, GM360, GM660, GM380, MTM800 Tetra,			
		MTM5400 Tetra, DM 3400, DM 3401, DM 3600, DM 3601, DM 4400, DM 4401, DM 4600, DM 4601, DM			
		1400, DM 1600 & DM 2600			
Motorola	AD MT-CM	CM-140, CM-160, CM-340, CM-360			
Kenwood	AD KW TK-762	TK-760, TK-860, TK-762, TK-780, TK-880, TK-980, TK-981			
Kenwood	AD KW TK-7102H	TK-7180, TK-7189E, TK-8180, TK8189E, TK-7302/8302, NX-700 / 800, TK-7360, TK-8360			
Kenwood	AD KW TK-7160	TK-7160, TK-7162, TK-8160, TK-8162, TK-7102, TK-8102			
Icom	AD IC IC-F310	IC-F310s, IC-F410s, IC-F310, IC-F410, IC-F510, IC-F610, IC-F320s, IC-F420s, IC-F320, IC-F420, IC-F520			
Icom	AD IC IC-F1700	IC-F1710, IC-F2710, IC-F1810, IC-F2810			
Icom	AD IC IC-F1010	IC-F1010, IC-F2010, IC-F1020, IC-F2020, IC-F1610, IC-F2610, IC-A110 Euro			
Icom	AD IC IC-F110 IC-F110, IC-F110S, IC-F210, IC-F210S, IC-F121, IC-F121S, IC-F221S, IC-F21S, IC-F11				
		F111S, IC-F211S, IC-F5022, IC-F6022			
Icom	AD IC IC-F5062	IC-F5062, IC-F6062			
Tait	AD TA-8000	TM-8105, TM-8110, TM-8115, TM-8250, TM-8255			
Yaesu/Vertex	AD VS VX-2200	VX2200E, VX2100E			
Yaesu/Vertex NEW	AD VS VX-4500	VX-4500 / 4600			
Yaesu/Vertex	AD VS FP-2500	VX-2000V, VX-2000U, FP-2500E			
Yaesu/Vertex	AD VS VX-4104	VS-4104-0-50, VX4100E, VX4200E			
Maxon	AD MX PM160	PM100, PM160			
Nokia EADS	AD NK EA-TMR880	TMR880			
Nokia EADS	AD NK EA-TMR880i	TMR880i, TMR880i remote head			
Novel	AD NR-M400	NM-60-100, NM-60-400			
HYTERA	AD HYT TM 600	TM600, TM610			
HYTERA NEW	AD HYT 785	MD 785, MT 680			
ALL	AD UN UNI	Our most popular unit - Universal wedge base unit to fit any radio			
Battery Back Up	AD BBB	Battery back up box including fitted 7Ah battery – Turnkey solution			
Battery Back Up	AD BBB NB	Battery back up box excluding battery. Please purchase a 7Ah GEL battery locally			

## **Technical Data**

Input voltage range	Auto-Select, 85-135Vac & 170-265Vac, 47-440Hz		
Output voltage options	13.6Vdc. Worst case limits are +/- 4%		
Maximum current	9A (standard version) 14A (HP14 version)		
Output noise	<50mV pk-pk at continuous load		
Power Conversion Efficiency	Typically 85%		
Isolation between input and	1.5kVac/3.0kVac rms		
case/output			
Isolation casework to ground	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	4 x 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	Protected by independent shut down circuit		
Transients	Protected by filters and rugged components		
Catastrophic failure	Protected by input and output fuses		
Approvals	2004/108/EC The general EMC directive		
	2006/95/EC The low voltage directive		
Tested to	93/68/EEC The CE marking directive		
rested to	EN50081-1, EN50082-1, EN55014-1, EN61000-3-		
	3, EN60950, EN60945, UL1950, CSA950-95, FCC Class "B", VDE0805		
Maylings	CE Class B , VDE0805		
Markings	LE .		

Weights and Dimensions							
	Width	Depth	Height	Weight			
AD UN UNI	168mm	125mm	58mm	800g			
AD BBB	163mm	145mm	70mm	2810g			
AD BBB NB	163mm	145mm	70mm	318g			
NOTE: The general body of all wedges measure as above. The endplates protrude further to allow fixing to the radio.							





Alfatronix Limited, 29 Newtown Business Park, Poole, Dorset, BH12 3LL, England Telephone: +44 (0)1202 715517. Fax: +44 (0)1202 715122
Website: <a href="mailto:www.alfatronix.com">www.alfatronix.com</a> E mail: <a href="mailto:sales@alfatronix.com">sales@alfatronix.com</a>
An ISO9001:2000 Registered Company



