

# 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.

**NEW**

**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.

## Can't find what you're looking for?

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

<b>AD</b>	Alfatronix AD Series
<b>MT</b>	Denotes the radio manufacturer. In this case Motorola
<b>CM</b>	Denotes a popular radio compatible with this unit.
<b>HP14</b>	Only add HP14 if the 14A version is required. Otherwise leave blank
Please note: Like most part numbers, the CM fits a <b>range</b> of radios, not just the CM. See overleaf for a complete list.	



We started making these for Motorola radios 9 years ago, now we have 24 varieties for 9 manufacturers.

## 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.

Radio Transceiver

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Alfatronix Desktop Power Supply

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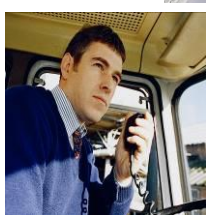
Alfatronix Battery Back Up Box



The desktop units are supplied with endplates configured to fit with your radio – see complete list overleaf.



For a complete system, order our fully compatible battery back up box – P/N AD BBB (to include a 7Ah battery) or AD BBB NB (excluding the battery).



**AlfaTRONIX**

## Battery Charging Curve



# 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, DM 3400, DM 3401, DM 3600, DM 3601, DM 4400, DM 4401, DM 4600 & DM 4601
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-F221, IC-F221S, IC-F111, IC-F211, IC-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 <b>NEW</b>	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 <b>NEW</b>	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 case/output	1.5kVac/3.0kVac rms
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 -25°C to +100°C
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 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

### 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.



For mains battery chargers, please ask for the **IC Series** information



For regular "brick in the lead" power supplies, please ask for the **AD Series** information



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