

WATT POWER SOLUTIONS

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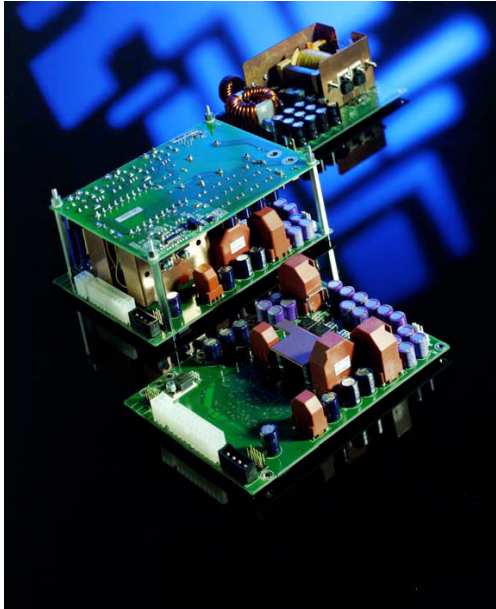
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VAT Reg No: 776 3065 10



AMPX12/24 Automotive ATX Power Supply



Input

Input Voltage Range	12V nominal 7.5V to 18V DC	24v nominal 18V to 30V DC
Battery Low shutdown voltage	11V +/- 0.75V	TBD
Battery Low detection duration	On board, but not enabled yet. (Set up via software)	
Battery Good detection voltage	On board, but not enabled yet. (Set up via software), Power OK.	
Input Current Drain	250mA	250mA
Efficiency	>90% at optimum loads	

Output

Without Fan : 80W Maximum
With Fan : 150 W Maximum

Nom Voltage	O/P Current	Regulation	Ripple and Noise
+3.3V	12A max	2%	50m V p-p max
+5V	12A max	2%	50m V p-p max
+12V	5A max	2%	50m V p-p max
-12V	1.5A max, 2A peak	10%	150mV p-p max
+5V standby	1A max, 1.2A peak	2%	50m V p-p max

Features

The power supply is software controlled. On request, special features like Power Down or Power Up delays, monitoring actions – voltages etc, can also be provided.

MTBF

25K – 45K Hrs. Depends on circumstances, and maintenance.

Ignition Input Current

<250mA

Operating Temperature

-25deg C to 70deg C

Mechanical

PCB Dimensions Open Frame: 156mm (L) x 122mm (W) x 70mm (H)
Cased Mobile Version: 280mm (L) x 210mm (W) x 100mm (H)

Input Fuse

15A ATO replaceable Automotive blade.

Input Power Mating connector	<u>Open Frame Version</u> Solder / Screw fixing on circuit board <u>Cased Mobile Version</u> AMP T3109-001 3 pin input plug
Output Power Connectors	<u>Open Frame Version</u> 20 pin ATX MB power cable 240mm long, with 8 pin Drive power connector to 3 x HDD and 1 x FDD power connectors. A 4 pin ATX power switch cable 420mm long is also provided. <u>Cased Mobile Version</u> AMP - T3140-001 6 Pin overall output plug AMP – T3108-001 3 Pin 12VDC output plug

Warranty **1 year**

Ordering Information

AMPX1224/12/8/O	12V DC input	80W output open frame
AMPX1224/24/8/O	24V DC input	80W output open frame
AMPX1224/12/8/T	12VDC input	80W output cased mobile version
AMPX1224/24/8/T	24VDC input	80W output cased mobile version
AMPX1224/12/8/T/S	12VDC input	80W output cased mobile version, including load dump suppression
AMPX1224/24/8/T/S	24VDC input	80W output cased mobile version, including load dump suppression
AMPX1224/12/15/T	12VDC input	150W output cased mobile version
AMPX1224/24/15/T	24VDC input	150W output cased mobile version
AMPX1224/12/15/T/S	12VDC input	150W output cased mobile version, including load dump suppression
AMPX1224/24/15/T/S	24VDC input	150W output cased mobile version, including load dump suppression

Applications

- Expandable mobile PC
- Law enforcement vehicles
- Telematics
- Mobile GPS and Tracking Systems
- Mobile MP3 and Multi-Media Computers
- Computers in Trucks, RV's, Boats, Aircraft, Inventory Carts etc...

Application Notes

The AMPX Series was specifically designed for use within an automotive application to power ATX motherboards. Your PC will be ready to go as soon as you start the engine. When the engine is switched off the PC can go into shutdown mode, standby or hibernation automatically.

The DC-DC converter has a micro-controller that monitors and controls various functions of the power supply operation. Vehicle battery voltage is monitored to protect against deep discharge. The supply can be programmed to shut down the PC for up to one hour. The outputs of the power supply are monitored to assure a proper PC operation.

“S” series versions are input power protected against extreme transients, load dumps and double battery conditions. The PC does not re-boot during engine starting or cranking. It also uses the state-of-the-art technologies and most advanced techniques to maximise efficiency, performance and reliability.

The DC-DC converter is galvanically separated, so influence free operation of devices can be guaranteed. (See installation guide with products).

The Cased Mobile Version is fully shock proofed, for mobile environments, and is particularly suited to diesel vehicles that produce low frequency vibrations.

The supplies are fully EMC tested and “E” marked for mobile vehicle applications. Product can be CE marked if requested.