



DC Power Supply for PC/104 PS104



Features

- ✓ Distributed Power Architecture (DPA)
- ✓ 9-75Vdc input range with safety ground
- ✓ Input/output protection and filtering
- ✓ Isolated/regulated outputs
- ✓ Ultra-low noise design
- ✓ Fanless extended-temp

The PS104 power supply is made to tackle tough voltage problems in telecom (48Vdc), factory (24Vdc), and vehicular (12Vdc) applications. It is designed for customers who want a DPA system in which fewer wires, less complex grounding and smaller gauge wiring can be used to supply local power.

The PS104 is typically sourced from a universal AC/DC bulk supply already in the system. Wires can be run from the bulk supply to the PS104 supply, which is part of the PC/104 stack, thereby

eliminating nuisance CPU reset problems associated with incorrect voltage drop/current calculations. The input section has been designed to handle the worst case of voltage fluctuations, over-voltage spikes, transients, ESD and includes a safety ground, fuse, MOV, differential/common-mode filtering, and polarity reversal protection.

The output section for the +5Vdc has a Pi-filter with tranzorb protection to guard against over voltage. The +/-12Vdc has multiple ceramic and tantalum caps for filtering.

Software Support

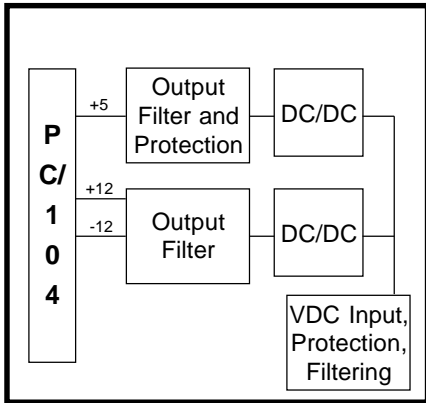


Compatible Hardware

All Micro/sys products

Mounting/Packaging

PC/104 standard



Specifications:

Mechanical:

- PC/104 standard
- 3.55" (plus I/O region) x 3.775"
- PS104 needs to mount on top of the PC/104 Stack

Input Power:

Model#	Input Voltage Range
PS104-12	9Vdc-18Vdc
PS104-24	18Vdc-36Vdc
PS104-48	36Vdc-75Vdc
The same for option "T"	

Input Connector:

- 3-pin 3.5mm screw-terminal/locking plug and header
- Pin 1 (+IN)
- Pin 2 (-IN)
- Pin 3 (Safety ground)

ESD:

- On-board jumper can bleed off static voltage from the output (caused by common-mode leakage current) to the safety ground or the -IN. This lowers the susceptibility to ESD.

Output Noise Levels:

- Typical < 40mVp-p (Switching frequency 350kHz to 400kHz)
- Typical < 20mVp-p (Wide-bandwidth noise <20MHz)

Output Short Circuit Protection:

- Indefinite with Automatic Recovery

Isolated Output Power:

V_{IN}	V_{OUT}	A_{OUT} to $+50^{\circ}C$ Amb	A_{OUT} to $70^{\circ}C$ Amb	A_{OUT} to $85^{\circ}C$ Amb
12	5	5	4	2.5
24, 48	5	6	5	3.5
12, 24, 48	± 12	± 250	± 250	± 150

Environmental:

- $-40^{\circ}C$ to $+85^{\circ}C$ operating (PS104 needs to mount on the top of the PC/104 Stack)
- 5%-95% relative humidity, non-condensing

Ordering Information:

PS104-12	+12Vdc Input/+5Vdc Output
PS104-24	+24Vdc Input/+5Vdc Output
PS104-48	+48Vdc Input/+5Vdc Output
PS104-12T	+12Vdc Input/+5Vdc Output/ $\pm 12Vdc$ Output
PS104-24T	+24Vdc Input/+5Vdc Output/ $\pm 12Vdc$ Output
PS104-48T	+48Vdc Input/+5Vdc Output/ $\pm 12Vdc$ Output
PS104-ADAP-AC12	110/220VAC desktop power supply for PS104-12
PS104-ADAP-AC24	110/220VAC desktop power supply for PS104-24
PS104-ADAP-AC48	110/220VAC desktop power supply for PS104-48
PS104-ADAP-AUTO	Auto lighter to PS104-12 cable assembly