

# TPSi1000-5-12

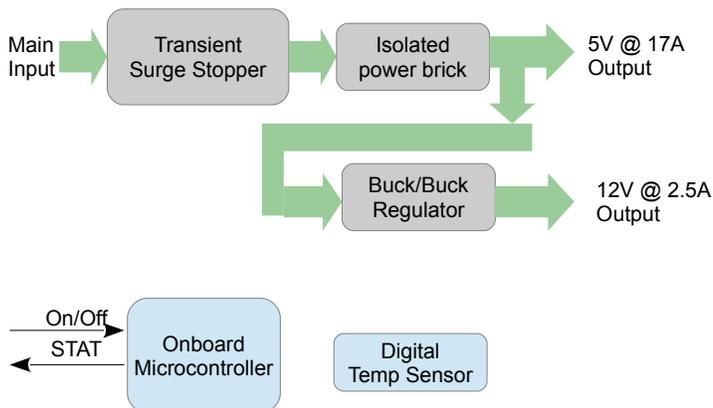
PC/104 Isolated Power Solution

DC/DC 85W, 5V & 12V



The TPSi1000-5-12 is an isolated PC/104-Plus power solution for use in embedded applications requiring isolation. The wide-range input voltages, transient suppression, isolation and pluggable terminal mating plugs make the TPSi1000-5-12 ideal for use in rugged and hostile applications. Designed tough for harsh environments including military standards, shock, vibration and extended temperature.

TPSi1000-5-12 Block Diagram



## Features

- **Enhanced Protection**  
2250V input/output isolation  
6000W transient suppression  
Active input voltage clamping
- **Wide Input Voltages**  
9 to 33VDC
- **PC/104 Plus form factor**
- **Standard Outputs**  
5V @ 17A  
12V @ 2A
- **Extended Temperature**  
-40°C to +85°C
- **Mechanical shock & vibration**  
MIL-STD-810 levels
- **High Efficiency**  
Up to 88% efficiency 5V output

## Related Products

- **VDX104-1E:** sub 2 watt X86 PC/104 embedded processor with onboard DDR2 RAM, RS232, USB and ethernet.
- **TCB1522:** Communication module with isolated RS232, RS485, CANbus and MultiTech universal sockets.
- **IR104:** I/O module with 20 isolated digital inputs, 20 relay outputs.

## Specifications

### Electrical

#### Input Voltage Range and Protection

- 9 to 33V input range
- Transient surge stopper designed to MIL-STD-1275 levels.

#### Output Power

- 5V @ 17A
- 12V @ 2A

### Mechanical

#### Dimensions

- Footprint: 3.55 x 3.775" [90 x 90mm]
- Height: 0.6" [15.24mm]

#### Weight

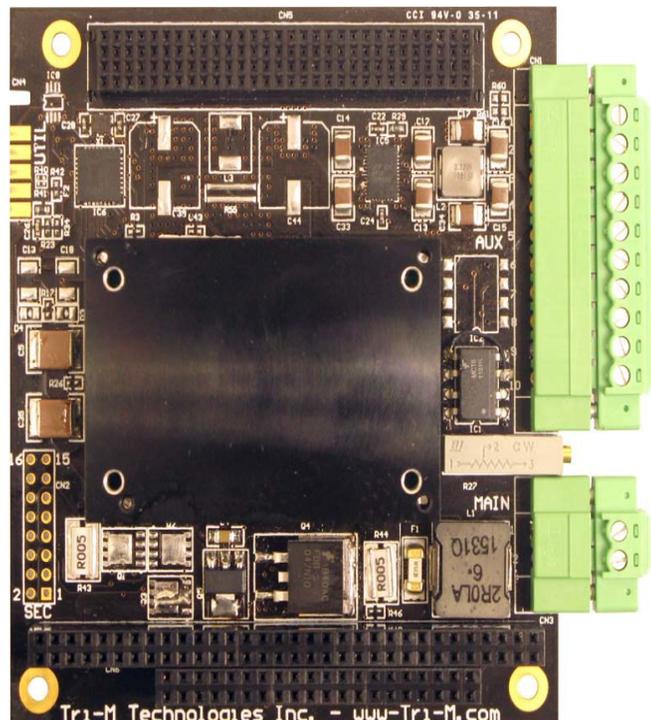
- 2.9 oz [82 grams] (V12SC-SER)

### Environment

#### Operating Temperature

- -40 to 85deg (V12SC-SER)

## Top View



## Ordering Information

**Model:** [TPSi1000-5-12\[-B1\]\[+B2\]\[-CC\]-PBF](#); PC/104 size, 12V main output, 5V power output, smart Bus Options

where [-B1] is the optional PC/104 bus configuration  
“-B1” is blank, stack through PC/104 bus (ex:TPSi1000-5-12-PBF)  
“-B1” is “-N”, no PC/104 bus (ex: TPSi1000-5-12-N-PBF)  
“-B1” is “-NS”, non-stack through PC/104 bus (TPSi1000-5-12-NS-PBF)

where [-B2] is the optional Plus bus configuration  
“+B2” is blank, stack through Plus bus (ex:TPSi1000-5-12-PBF)  
“+B2” is “+N”, no Plus bus (ex: TPSi1000-5-12[-B1]+N-PBF)  
“+B2” is “+NS”, non-stack through Plus bus (ex:TPSi1000-5-12[-B1]+NS-PBF)

### Conformal Coat Options

where [-CC] is the conformal coating selection.  
“-CS” is silicon conformal coating  
“-CU” is urethane conformal coating  
“-CH” is Humiseal #1B73 conformal coating