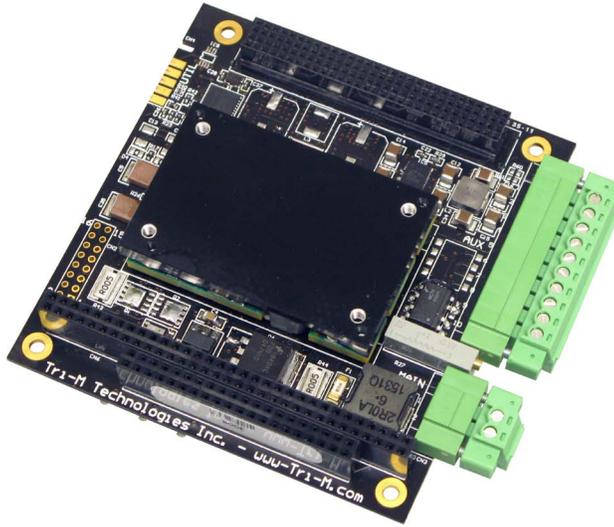


# TPSi2100 *PC/104-Plus Power Solution*

## Isolated 100W DC-DC Power Converter

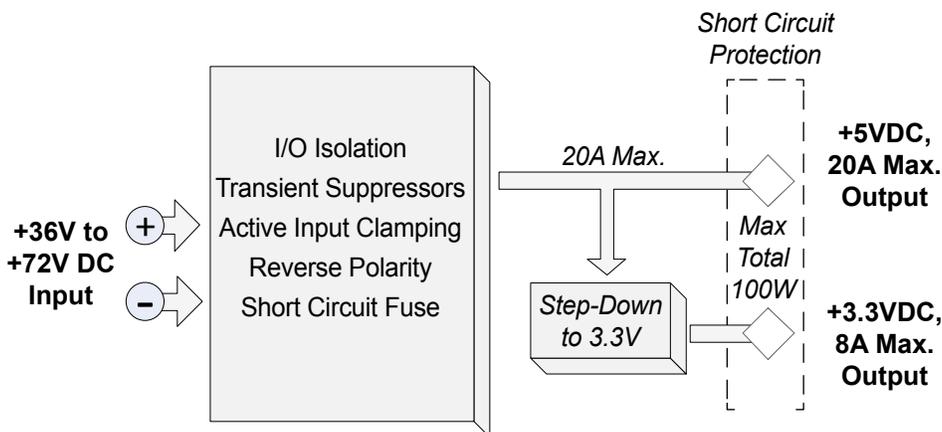


The TPSi2100 is an isolated PC/104-Plus power solution, designed for embedded applications requiring isolation and clean power in rugged environments.

With wide-range input voltages, transient suppression, galvanic isolation, and pluggable terminal mating plugs, this rugged design is ideal for any industrial application.

Designed for harsh environments, including military standards, shock, vibration and extended temperature, the TPSi2100 is well suited for transportation, defence, and aerospace industries. For reliable protection and high performance, the TPSi2100 is the perfect solution for isolated DC power.

### Block Diagram



## Key Specifications

- **Enhanced Protection**  
2250V input/output isolation  
6000W transient suppression  
Active input voltage clamping  
Reverse polarity, short circuit
- **Wide Input Voltages**  
Ranges from 36 to 72 VDC
- **Standard Outputs**  
5V@20A , 3.3V@ 8A  
100W combined total
- **High Performance**  
Up to 88% efficiency
- **Extended Temperature**  
-40°C to +85°C / -40°F to +185°F

## Advantages

- **Rugged Design**
- **Galvanic Isolation**  
Reliable system protection
- **Simple Installation**  
Terminal socket mating plugs
- **Space Efficient Solution**  
High density PC/104-Plus module

## Our Capabilities

- **Application Engineering**
- **Rapid Development**
- **Engineered Systems**
- **Custom Software**
- **Industry Standards & Certification**
- **Exceptional Customer Experience**

<sup>1</sup> For more information, see the Certificate of Compliance available on our website at [www.tri-m.com](http://www.tri-m.com).

# TPSi2100 *PC/104-Plus Power Solution*

## Isolated 100W DC-DC Power Converter

# TRI-M

TECHNOLOGIES

## Specifications

### Electrical

<b>Input Voltage Range</b>	36 to 72VDC
<b>+5V Output</b>	20A maximum
<b>Maximum Combined Power</b> (see note 1)	100W total
<b>Efficiency</b> (see note 1)	Typ 88%
<b>Isolation Voltage</b>	2250V maximum
<b>Transient Suppression</b>	6000W total
<b>Output Ripple/Noise</b> (see note 2)	Typ 25mV, maximum 50mV
<b>Line Regulation</b> (see note 2)	±0.05% maximum
<b>Load Regulation</b> (see note 2)	±0.05% maximum
<b>Current Limiting Fuse</b>	Onboard 15A (on input source)

### Mechanical

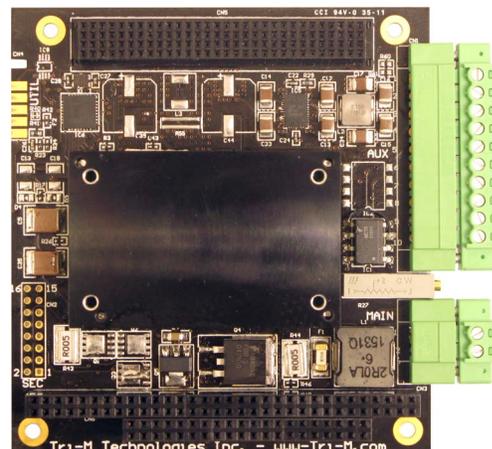
<b>Dimensions</b>	PC/104 compliant 90 × 96 × 15mm (3.55 × 3.775 × 0.6")
<b>Weight</b>	110g (3.9oz) no plugs 117g (4.1oz) with plugs

### Environment

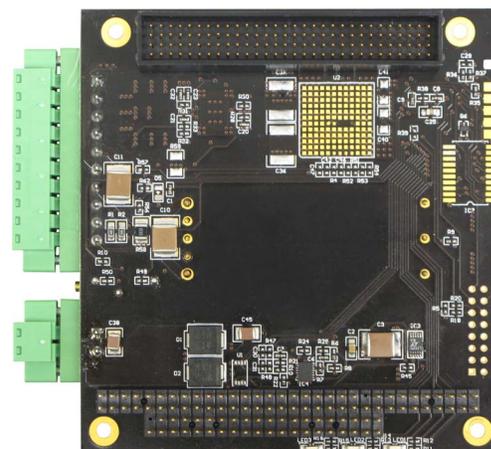
<b>Operating Temperature</b> (see note 1)	40°C to +85°C (-40°F to +185°F)
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- 1) Maximum power may be derated due to temperature.  
2) 5V Output

Top View



Bottom View



**Note**  
For detailed dimensions, connector and pin spacing information, please see the *TPSi2100 User Guide*.

## Ordering Information

### Models

TPSi2100 +5V, combined total 100W

# TRI-M

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