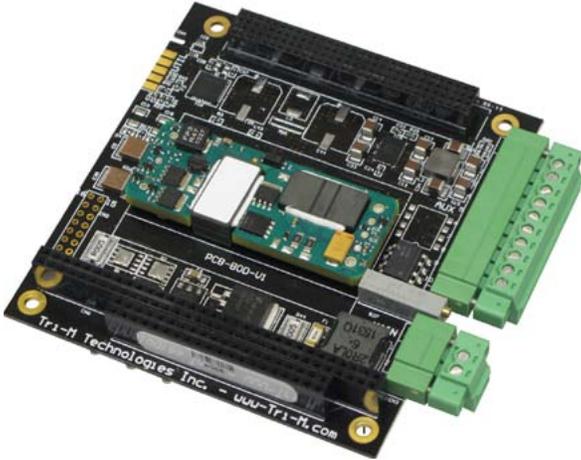


# TPSi1075 *PC/104-Plus Power Solution*

## Isolated 75W DC/DC Power Converter

## Overview

Tri-M's TPSi1075 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 quick-disconnect 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 TPSi1075 is well suited for transportation, defence, and aerospace industries. For reliable protection and high performance, the TPSi1075 is the perfect solution for isolated DC power.

## Key Specifications

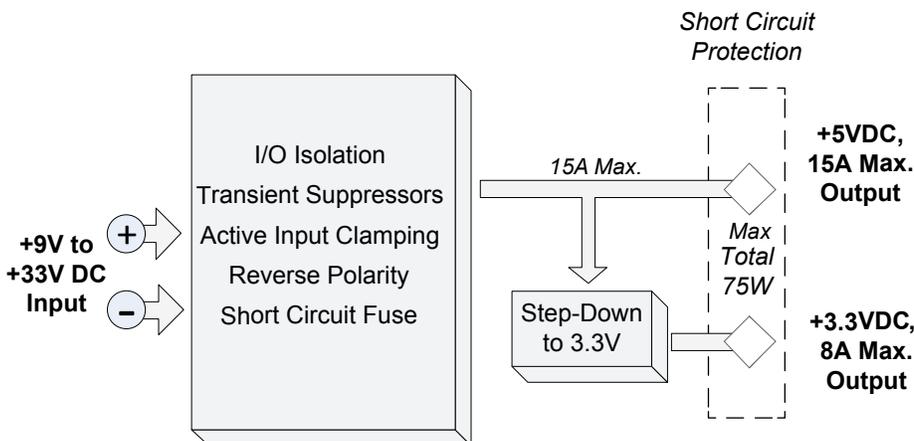
- **Enhanced Protection**  
2250V Input/Output Isolation  
6000W Transient Suppression  
Active Input Voltage Clamping  
Reverse Polarity, Short Circuit
- **Wide Input Voltages**  
Ranges from +9V to +33V DC
- **Standard Outputs**  
+3.3V@8A Max. & +5V@15A Max.  
75W Combined Total
- **High Performance**  
Maximum 88% Efficiency
- **Extended Temperature**  
-40°C to +85°C / -40°F to +185°F

## Applications

- ✓ Military & Civil Vehicles
- ✓ Aerospace & Defence
- ✓ Industrial Automation
- ✓ Telecommunications
- ✓ Undersea & Marine

## Advantages

- **Rugged Design**  
Designed to Meet MIL Standards
- **Galvanic Isolation**  
Reliable System Protection
- **Simple Installation**  
Terminal Socket Mating Plugs
- **Space-Efficient Solution**  
High Density PC/104-Plus Module



# TPSi1075 *PC/104-Plus Power Solution* Isolated 75W DC/DC Power Converter

# TRI-M

TECHNOLOGIES

## Specifications

### Electrical

Input Voltage Range	+9V to +33V DC
+3.3V Output	8A Max.
+5V Output	15A Max.
Maximum Combined Power	75W Total*
Efficiency	Maximum 88%*
Isolation Voltage	2250V Max.
Output Ripple/Noise**	80mVp-p to 125mVp-p
Line Regulation**	±0.25% Max.
Load Regulation**	±0.125% Max.
Switching Frequency**	215kHz to 250kHz
Current Limiting Fuse	Onboard 15A
Quiescent current	48ma (LEDs & Outputs Off)

### Mechanical

Dimensions	PC/104 compliant, 90mm x 96mm x 15mm (3.55" x 3.775" x 0.6")
Weight	83g (3oz) no plugs 90g (3.2oz) with plugs

### Environment

Operating Temperature*	-40°C to +85°C (-40°F to 185°F)
Thermal Protection/Shutdown	+120°C (248°F)

### Certifications



Manufactured in  
ISO 9001:2008,  
ISO 14001:2004 &  
ANSI/ESD S20.20  
Environments

\* Maximum power may be derated due to temperature which effects the efficiency. Please see the Technical Notes section of the User Guide for more on efficiency and temperature derating.

\*\* 5V Output

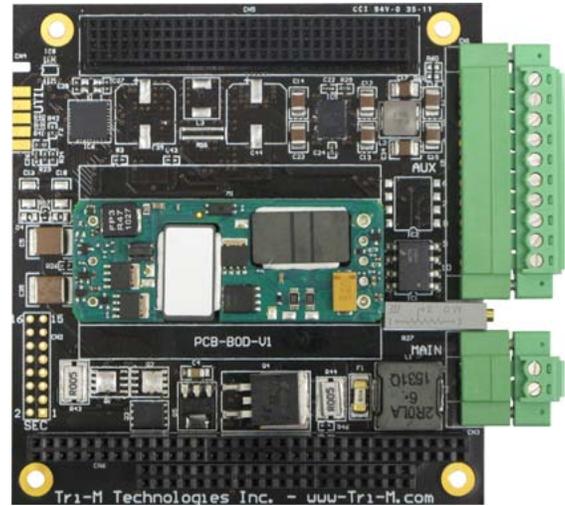
### MODELS

TPSi1075	+3.3V,+5V, Combined Total 75W
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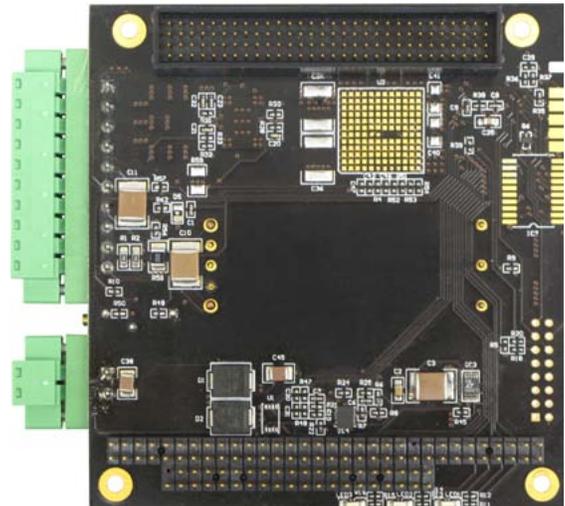
### OPTIONS

Conformal Coating

Non-Stackthrough



Top View



Bottom View



### Note

For detailed dimension, connector, and pin spacing information, please see the [User Guide](#)

# TRI-M

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