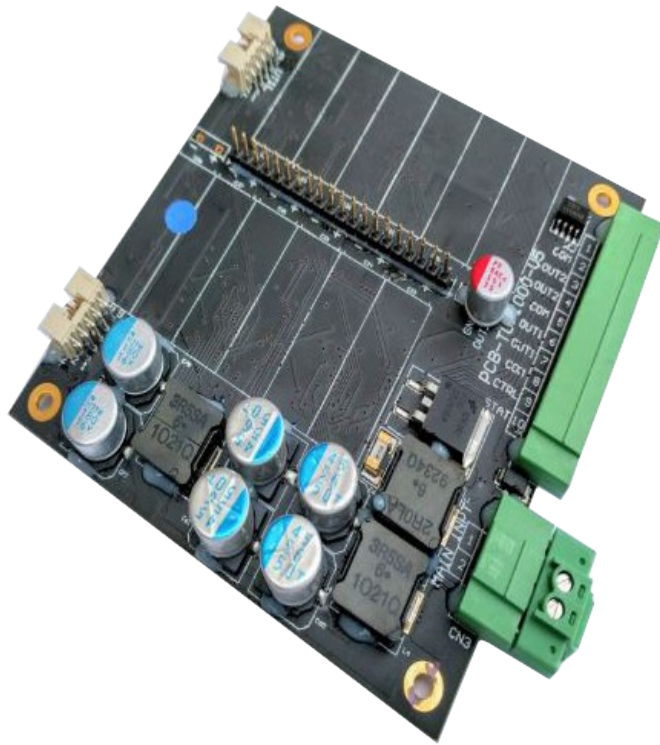


TPC1000

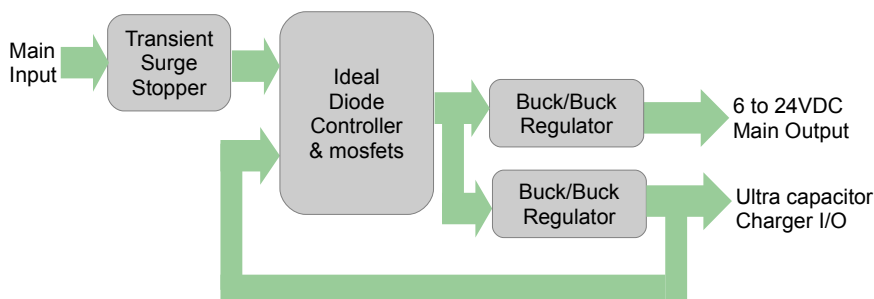
PC/104 Footprint Size Power Solution

Built Rugged for Hostile Environments



The TPC1000 is a Small Form Factor (SFF) DC-DC converter with an output that is programmable from 6 to 24VDC. The TPC1000 includes a smart charger for ultra capacitors and when connected with ultra capacitors provides a seamless UPS backup. The wide-range input voltages, transient suppression and pluggable terminal mating plugs make the TPC1000 ideal for use in rugged and hostile applications. Designed tough for harsh environments including military standards, shock, vibration and extended temperature.

TPC1000 Block Diagram



Features

- **Programmable main output**
Adjustable between 6 and 24VDC
Can be ordered at a fixed voltage
- **Enhanced Protection**
10000W transient suppression.
Active input voltage clamping
Reverse polarity, short circuit
- **Wide Input Voltages**
7 to 33VDC
- **PC/104 foot print size**
90 x 96mm
- **Extended Temperature**
-40°C to +85°C
- **Mechanical shock & vibration**
MIL-STD-810 levels
- **High Efficiency**

Related Products

- **TBP4K50:** 500 joules ultra capacitor backup module. PC/104 footprint size and height. 90 x 90 x 10mm
- **TBP41K0:** 1000 joules ultra capacitor backup module. PC/104 footprint size 90 x 96 x 60mm
- **TBP42K0:** 2000 joules ultra capacitor backup module. PC/104 footprint size 90 x 96 x 60mm
- **TBP44K0:** 4000 joules ultra capacitor backup module. PC/104 footprint size. 90 x 96 x 60mm

Specifications

Electrical

Input Voltage Range and Protection

- 7 to 33V input range
- Transient surge stopper designed to MIL-STD-1275

Output Power

- Main output: 6 to 24VDC, 36 watt

Mechanical

Dimensions

- Footprint: 3.55 x 3.775" [90 x 96mm]
- Height overall: 0.55" [14mm]
- Height components top of pcb: 0.4" [10.16mm]

Weight

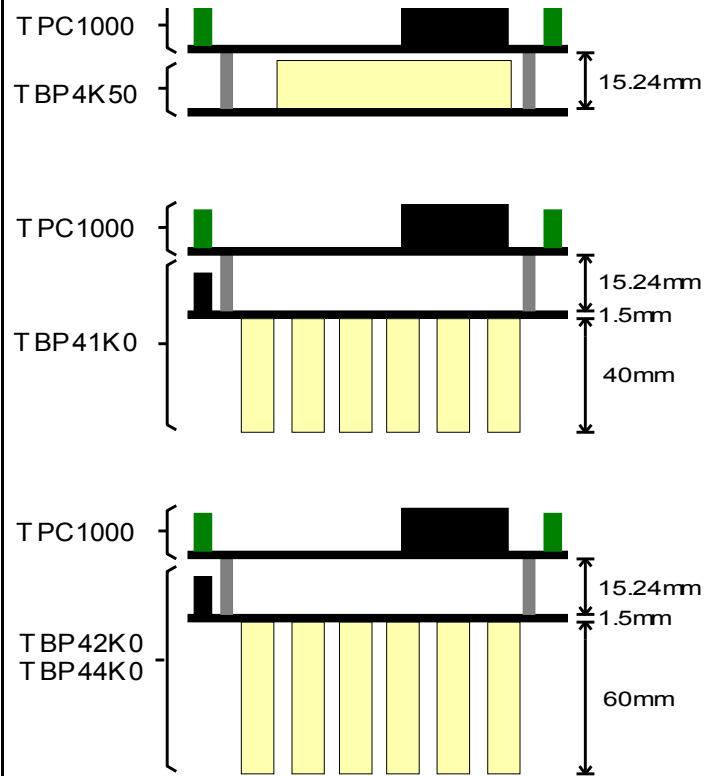
- 2.4 oz [68 grams]

Environment

Operating Temperature

- -40 to 185degF [40 to 85degC]

Dimensions TPC1000 & CBP41/42/44K0 Modules



Detail	Units	Ultra Capacitor Backup Power Module			
		TBP4K50	TBP41K0	TBP42K0	TBP44K0
Holdup time 5 watt load	Seconds	100	200	400	800
Holdup time 10 watt load	Seconds	50	100	200	400
Holdup time 25 watt load	Seconds	20	40	80	160
Holdup time 35 watt load	Seconds	Not recommended		55	110

Ordering Information

Model: TPC1000-X[-CC]-PBF; PC/104 size

Bus Options

where:

“X” is output voltage between 6 and 24VDC

ex: TPC1000-22-PBF; Output voltage is 22VDC

“X” is “ADJ”; Main output voltage is programmable over entire range

ex: TPC1000-ADJ-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