CONDOR

1000 WATTS
POWER FACTOR CORRECTED
SINGLE OUTPUT, HOT SWAP

TCM-1000

Featuring:

- Diode isolated output for hot swap
- "Zero wire" slope program current sharing
- High power density **6.5 Watt/cu. in.**
- Industry standard DIN connector
- 0.99 typical power factor
- DC power good and AC power fail signals
- True remote inhibit
- Monotonic turn-on and turn-off
- Extended temperature operation
- High efficiency 87% typical (48 V units)
- Operating temperature range -20°C to +60°C

STANDARD TCM SERIES

MODEL	OUTPUT RATING	PWR OUT
TCM-1000-24	24V @ 41.6A	1000
TCM-1000-28	28V @ 35.7A	1000
TCM-1000-48	48V @ 20.8A	1000

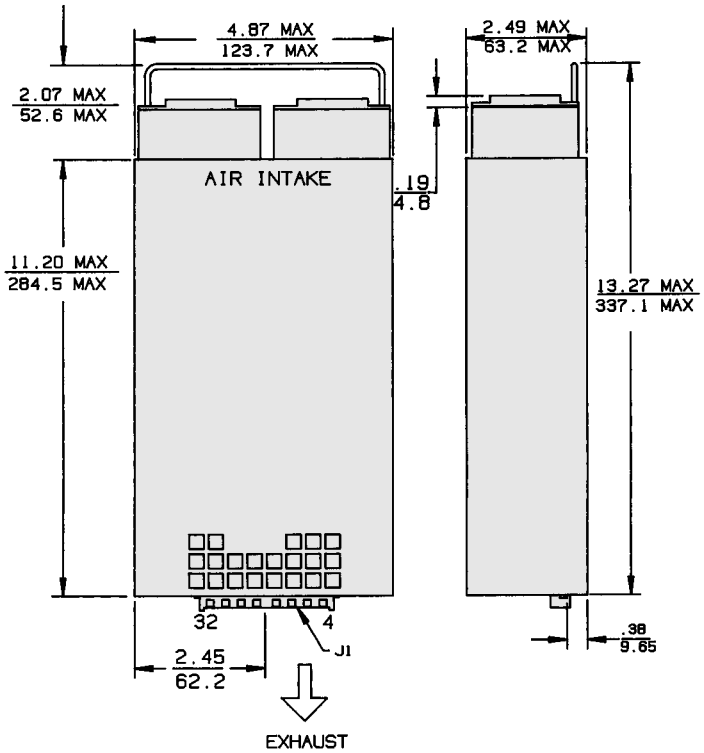
The 1000-watt TCM Series "hot swappable" power supplies deliver remarkable economy and reliability in applications that require redundancy over extended temperature ranges. These high-density, single-output supplies are available with a front panel and handle for use in sub-system racks or without handles for embedded applications.

Power factor correction, OR-ing diodes, and current sharing make the TCM Series an ideal choice for communications and data processing systems utilizing distributed power or redundant power architecture.

SEE TRS (RACK SYSTEM)

TCM-1000

5.2 lbs - 2.6 kgs



Dimensions: Inches
Millimeters

SPECIFICATIONS: ALL MODELS

INPUT

AC Input: 180-264 Vac, 47-63 Hz internally fused 10 A.
Power Factor: 0.99 typical at full load. Meets EN61000-3.2.
Inrush: Limited by thermistor, 40 Ampere maximum (8ms), cold start.
Hold Up Time: 20 ms minimum after removal of power supply at full load.
Efficiency: 87% typical @ full load.
AC Power Fail: Provides TTL "O" 5 ms before output voltage goes out of regulation band upon loss of AC power.

OUTPUT

Adjustability: User adjustable ±5% minimum.
Output: 48 V @ 20.8 Amp. (1000 W max.).
Line Regulation: ±0.2%
Load Regulation: ±2% (Slope Program) from 0 to 100% load changes.
Turn On Delay: 1 second typical.
Ripple & Noise: 0.5% p-p, measured at 20 MHz bandwidth.
Temperature Coefficient: 0.02% per degree C.
Stability: 0.1% over 8 hours, under constant line, load and ambient.
Transient Response: Output voltage returns to within 1% in less than 500 µs for a 50% load change. Peak transient does not exceed 3%.
Overload Protection: Electronic current limit, 120% maximum.
Overvoltage Protection: Protects load against power supply induced overvoltage. Trip point is factory set so that output voltage cannot exceed 136% of nominal. Requires AC input to be cycled to reset.
Remote Inhibit: Contact closure or TTL "0" turns off output.
DC Power Good: Provides a TTL "0" open collector when output is above 90% of nominal Maximum pull-up voltage 30 Vdc; maximum sink current, 10 mA.
Redundancy: Built-in OR-ing diode, slope program current sharing, and DIN blade connector provide "hot swap" and "N+1" capabilities. Current sharing remains within 10% of the unit's full output rating given 0.2% initial accuracy in the output voltage setting.
Current Sharing: As calibrated at factory, modules will share current within 10% of full rated load.
Reverse Voltage: Protected against reverse voltage up to twice output voltage rating. (internal OR-ing diode.)

ENVIRONMENTAL

Thermal Protection: Shuts down power supply if overheated. Automatic recovery.
Temperature Range: -20° to +60° C, full power, de-rate to 66% maximum power @ 71° C.
Safety Agencies: Approved to UL1950; CSA 22.2 #950; IEC 950 and TUV EN60950, Class 1 SELV, CE 73/23/EEC//93/68/EEC (low voltage directive).
Conducted RFI: Meets FCC Part 15, Subpart J, Class A; EN55022 Class B; and CISPR 22 Class B.
Output Isolation: Isolated from ground 100 Vdc.
Cooling: Self-cooled by internal ball-bearing fan.

OPTIONS

Option "R" - Rack Mount Panel: special panel that is required for rack mounting. Consult factory for other available options.

AC INPUT (180-264 VAC Continuous Range)

LOCATION	230 VAC	CONNECTOR
Z32	Line 1	Eurocard Connector - Male DIN 41 612 Level 1- Type H
D30	Line 2	
Z28	Safety Ground	

DC OUTPUT

FUNCTION	LOCATION	NOTES	CONNECTOR
Output	Z12 D14 Z16 D18	(+) Polarity	Eurocard Connector - Male DIN 41 612 Level 1- Type H
Voltage	Z4 D6 Z8 D10	(-) Polarity	

STATUS AND CONTROL

FUNCTION	LOCATION	NOTES	CONNECTOR
DC Power Good	Z20	Reference to Common	Eurocard Connector - Male DIN 41 612 Level 1- Type H
AC Power Fail	D22		
Inhibit	Z24		