WHEN RELIABILITY IS IMPERATIVE™



Rock Solid Reliability for over 50 years.



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ISO9001







SBA Certified Woman-Owned Minority Business Enterprise (MBE) HUBZone Certified ISO9001 and AS9100 Certified

QPL Certified products

NAICS Codes: 334416, 334419, 335311, 335999 DUNS: 36-065-1954 Cage Code: 58910

CM1000 1000 Watt AC-DC Switchers

Features:

- Power Factor Correction
- Compliant with MIL-STD-461, CE101, and CE102
- Meets MIL-S-901 (High Impact Shock)
- Meets applicable MIL-STD-810
- CM1000 fully sealed to meet IP65 (Optional connectors available to meet IP67)



CM1000

- **Options available:**
- Droop (Zero Wire) Current Sharing
- Forced Current Sharing
- Internal ORing Diode

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CM1000 SPECIFICATIONS



CM1000 MECHANICAL DRAWING -

For Extreme Environments

- ✓ Power Factor Correction
- ✓ Compliant with MIL-STD-461, CE101, and CE102
- ✓ Meets MIL-S-901 (High Impact Shock)
- ✓ Meets applicable MIL-STD-810
- ✓ Fully sealed to meet IP65 (Optional connectors available to meet IP67) **Options:** Droop (Zero Wire) Current Sharing, Forced Current Sharing (up to 4 modules for a total of 4,000 watts) Internal ORing Diode

Specifications:

AC Input:

95-260 VAC, 47-440Hz, Single Phase, Power Factor Corrected. Meets MIL-STD-1399, Section 300, Type 1 Requirements (Spike Voltage Test)

Efficiency: 80% Minimum (88% Typ; 28 VDC Model at 100% Load)

Line Regulation: +1% of Nominal over the Full Range of Line Input Voltage

Load Regulation: $\pm 1\%$ for Change from No Load to Full Load

Ripple and Noise:

Peak-to-peak combined Ripple and Noise does not exceed 2% of Nominal on the Output Measured with a 20MHz bandwidth

Temperature Range: Storage, Transport and Handling: -50°C to + 85°C **Ambient Temperature:** -40°C to 70°C

Ordering Information:

Model Family (**CM1000** = 1000 Watt Output) **S** = Standard Connector (Unit meets IP65) or

C = Condensing Humidity Environment

Example as shown above: CM1000 - 1000 Watt Output with

 $\mathbf{M} =$ Fully Sealed Waterproof Connector (Unit meets IP67)

Voltage Output (see chart to right for Voltage options and Max Current)

Standard Connector, 28 Volt

Model Number System

CM1000 S 28

Baseplate Temperature:

-40°C to +70°C with no Power Derating

Overtemperature Protection: Output shut down if maximum case temperature limit is exceeded

Isolation: Input to Output: 1500 VDC 1500 VDC Input to Case: Output to Case: 500 VDC

Short Circuit Protection: Each unit is completely protected against a short circuit of any duration. The current limit circuit nominally set at 120% of full load to reduce voltage. Output is latched under short circuit condition. Auto-recovery from short circuit option is available.

Remote Error Sensing: Standard

Input Protection: Internal Fuse

Control Features: INHIBIT (TTL LOW = TRUE)



Reliability:

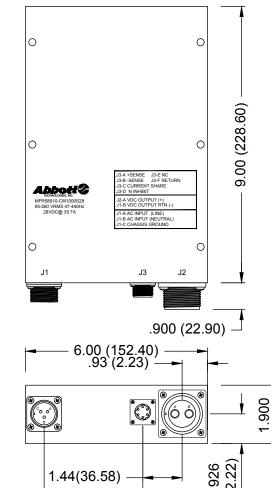
MTBF 124,545 calculated per MIL-HDBK-217Fn.2/25C/Full Load Ground Benign Environment

Electromagnetic Compatibility: Meets the following MIL-STD-461 requirements: CE101, CE102

Outline Dimensions: Refer to Mechanical drawings on opposite page

Weight: 5.5lbs Typical

> **Environmental Conditions:** Shock Test: Unit meets MIL-S-901 requirements (lightweight) Vibration Test: Unit meets MIL-STD-167, Type 1 requirements Humidity Test: Power supply operates without any evidence of degraded performance in non-condensing relative humidity up to 95%



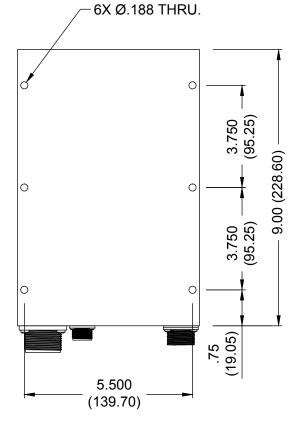
Maximum Current Output Rating

	Output Voltage	Max Current
	12V	75A*
	13.6V	73.5A
	15V	66.7A
	24V	41.7A
	28V	35.7A
	48V	20.8A

*Output power limited by connector current rating. Please contact technical support for alternative connector information **Call our Technical Support Department** with guestions: (818) 504-0644

2.95(74.93)

Any specifications subject to change without notice



(48.26)

N

J1



MS3102R16-10P

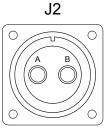
J1-A AC INPUT (LINE) J1-B AC INPUT (NEUTRAL) J1-C CHASSIS GROUND





MS3110E10-6S

J3-A +SENSE J3-B -SENSE J3-C CURRENT SHARE J3-D N INHIBIT J3-E NC J3-F RETURN



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MS3102R24-9S

J2-A VDC OUTPUT (+) J2-B VDC OUTPUT RTN (

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