



MS8 SERIES

MODULAR SYSTEMS / SERIES 8 / UP TO 150W

- Universal AC input
- Operates -40°C to +85°C
- Single and multiple outputs
- COTS modular construction
- Input and output filtering
- Fixed conversion frequency
- Over voltage and over current protection
- Custom configurations upon request



DESCRIPTION:

Prime Power's modular systems are complete turn-key systems. No external circuitry is required for proper operation. These systems are mainly comprised of Prime Power's own series of modular products, but are also designed to accept a wide variety of modular products made by other manufacturers. The flexibility of these designs allow for a large number of output and power combinations. This data sheet lists a few of the standards. Non-standards are reviewed upon request. Due to the systems modular construction, these products are ideally suited for ruggedized commercial or industrial applications as well as military grade applications.

GENERAL SPECIFICATIONS	
INPUT VOLTAGE:	90-132/180-264 VAC (Auto-ranging)
FREQUENCY RANGE:	47-440Hz
OUTPUT POWER:	Up to 150W
OUTPUT VOLTAGE:	3.3V, 5V, 12V, 15V, 24V Configurable
ISOLATION:	2500 VDC Input to output and case, 500 VDC output to case
PHYSICAL SIZE:	5.6" x 4.75" x 0.8"
WEIGHT:	Configuration dependent. Contact: Sales@Prime-Power.com
MTBF:	Contact: Sales@Prime-Power.com



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ELECTRICAL SPECIFICATIONS	
Set Point Accuracy	±1%
Line Regulation (Lo Line to Hi Line)	0.2% max.
Load Regulation (1/2-FL W/Sense)	0.2% max.
PARD (Ripple Noise) DC-20MHZ	1% typ., 3% max.
O.V.P.	Non-shutdown, auto recovery
Current Limit	105-130% rated current, fold back, auto recovery
Start Up Time	≤ 1S
Transient Response	±3% typ. ±2% for <100W, 200uS recovery, 20-80% load
Efficiency (MIN)	80%

Note: All Specifications are typical at 25°C with nominal input voltage under full output load conditions, unless otherwise noted.

ENVIRONMENTAL SPECIFICATIONS		
Pressure-Altitude	MIL-STD-810	Method 500.4
High Temperature	MIL-STD-810	Method 501.4 Procedure 1 & 2
Low Temperature	MIL-STD-810	Method 502.4 Procedure 1 & 2
Humidity	MIL-STD-810	Method 507.4
Fungus	MIL-STD-810	Method 508, Condition A
Salt Fog	MIL-STD-810	Method 509
Sand and Dust	MIL-STD-810	Method 501.4, Procedure 1 & 2
Explosive Atmosphere	MIL-STD-810	Method 511, Condition A
Acceleration	MIL-STD-810	Method 513.5, Procedure 1 & 2
Vibration	MIL-STD-810	Method 514.2
Shock	MIL-STD-810	Method 516.6
EMI/EMC	MIL-STD-461	FCC or MIL-STD Contact: Sales@Prime-Power.com

PHYSICAL CHARACTERISTICS	
Maximum Case Size	5.60 x 4.75 x .800 (inches)
Cooling Method	Conduction, base plate
Encapsulation	None, Conformal Coat, RTV on necessary components
Enclosure Finish	Black anodize
Baseplate Finish	Yellow Chromate
Input/Output Termination	25 pin D-sub, other configurations Contact: Sales@Prime-Power.com
Mounting Holes/Standard Threaded Baseplate	Threaded baseplate, (4x) 4-40
Weight	Configuration dependent, Contact: Sales@Prime-Power.com



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TEMPERATURE SPECIFICATIONS	
Operating; Baseplate Temperature	-40°C to +85°C
Storage Temperature	-55°C to +110°C
Voltage Drift Over Temperature	.02%/°C

MODEL SPECIFICATIONS (Most common configurations listed, non-standards upon request)			
PART NUMBER	OUTPUT 1	OUTPUT 2	OUTPUT 3
MS8-50/5	5V/10A		
MS8-60/12	12V/5A		
MS8-60/24	24V/2.5A		
MS8-82/3.3	3.3V/25A		
MS8-100/5	5V/20A		
MS8-120/12	12V/10A		
MS8-120/15	15V/8A		
MS8-120/24	24V/5A		
MS8-150/M1	12V/6.25A	12V/6.25A	
MS8-150/M2	15V/5A	15V/5A	

NOTES: 1.) Linearly derate from full load at 100 VAC to 50% load at 90 VAC. 2.) Above 240w: Linearly derate from full load at 25°C to 50% load at -40°C for startup only.

MECHANICAL DRAWING:

