



OHM
POWER
SOLUTIONS

M200SP

150/250Watt

Single Output Isolated
DC/DC Converter



Features:

- Designed to meet MIL-STD-704A, MIL-STD-1275A
- High efficiency – up to 88%
- Fully protected for Over Load/Short, Over-voltage and Over-Temperature
- Single output
- Base plate cooling
- No external EMI filter needed

Typical applications:

- Military
- Ruggedized
- Telecom
- Industrial



General specification	
DC Input	
Input voltage range	18-48V _{DC}
Input Per MIL-STD-704A	(Including 80V for 100ms)
Input Per MIL-STD-1275A	(Including 100V for 50ms)
Protection	Reverse Polarity Protection
DC Output	
Output voltage / Current	See table below
Line Load & Temperature regulation	< +/-2%
Current limit on each output	110% -130% of rated current
OVP	Over-Voltage on each output
Turn on Transient	No turn on transient
Load Transient Overshoot & Undershoot	Less than 1.5% at 10%-90% Load change
Isolation	
Input to Output:	100 V _{DC}
Input to Case:	100 V _{DC}
Output to Case:	100 V _{DC}
Interface	
Control Signals	TTL level – LOW < 0.7V, 5V > HIGH > 2.4V GND/OPEN – GND < 0.7V, OPEN > 2V At Open State no voltage over 12V is allowed on the signal line
Inhibit signal	TTL “1” or OPEN – will turn on the power supply (For normal operation leave the signal not connected) TTL “0” – will turn off the power supply
Signal RTN	Return Line of Input Signals ENABLE and SYNC IN Internally connected to return of Input AUX. P.S. – <i>Not Isolated from Input</i>
Output Good	TTL signal indicates if the output voltage is within the specified tolerance TTL “1” - output is within the specified tolerances TTL “0” - output is not within the specified tolerances The –VOUT SENSE (Pin #8) is used as reference ground for this signal
External Sync	Input (External clock, synchronize the power supply clock to external clock) Clock frequency: 312.5 KHz. Duty cycle: 50%
Internal Switching frequency	Internal frequency source: 312.5 KHz ± 5%
Environmental	
Operating Temperature	–55°C +85°C Base plate
Over-Temperature protection	at 100°C with auto recovery
Shock & Vibration	per MIL-STD-810F
EMI-RFI	per MIL-STD-461E, CE102, CS101, CS114, CS115, CS116, RE102, RS103
Mechanical	
Size	106.7mm x 63.5mm x 12.7mm
Weight	150 gram
Cooling	Base plate
Input / Output connector	30 PIN Airborne P/N RM272-030-312-2900 or eq.

Ordering Information

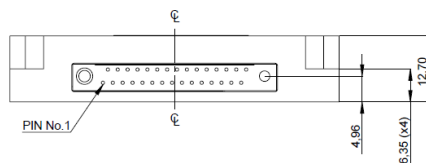
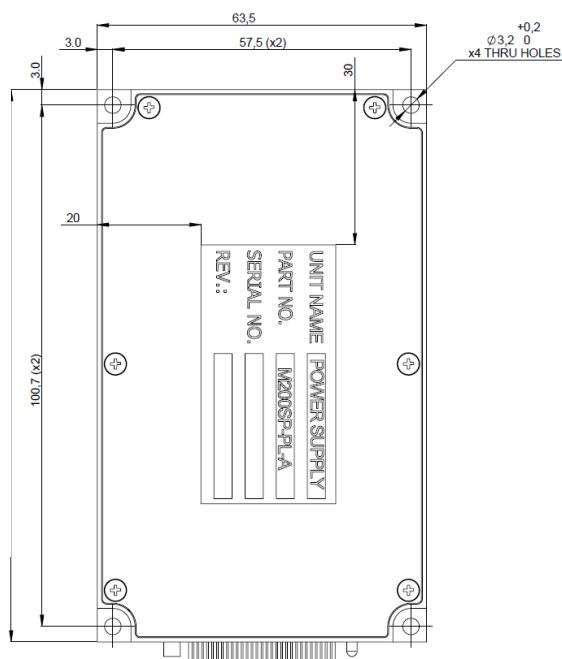
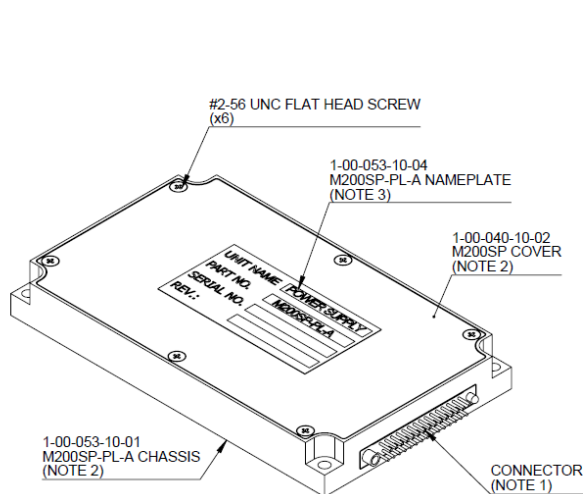
MODEL #	OUTPUT #	INPUT Voltage (V)	OUTPUT Voltage (V)	OUTPUT Current (A)	PULSE CURRENT (A) for 2 sec.	POWER (W)	PULSE POWER (W) for 2 sec.	R&N (mV)
M200SP-BR	1	18-48	+24	6	N/A	150	N/A	50
M200SP-PL-A	1	18-48	+28	7	12	200	288	50

PIN ASSIGNMENT

PIN NO.	PIN Function
10, 11, 23, 24, 25	+VIN
12, 13, 26, 27, 28	- VIN
30	Input Signal RTN
29	INHIBIT
14	Not Connected
15	Sync. IN

PIN NO.	PIN Function
1, 2, 3, 16, 17, 18	+Vout
4, 5, 6, 19, 20, 21	-Vout
22	+VOUT Sense
8	-VOUT Sense
7	Not Connected
9	Output Good

Outline Drawing



Note: Specifications are subject to change without prior notice by the manufacturer. Additional configurations and modifications available. Contact us for more details.