

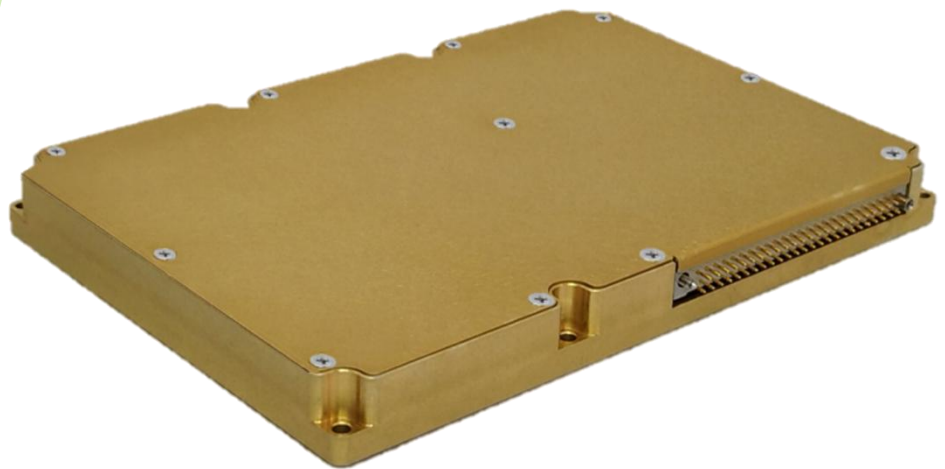


OHM
POWER
SOLUTIONS

M500SP

500Watt

Single Isolated Output
DC/DC Converter





Features:

- Designed to meet MIL-STD-1275D
- High Efficiency – up to 88%
- Fully protected for Over Load/Short, Over-voltage and Over-Temperature
- Five isolated outputs
- Base Plate cooling
- No external EMI filter needed

Typical applications:

- Military
- Ruggedized
- Telecom
- Industrial





General specification	
DC Input	
Input voltage range	16-33V _{DC}
Input Per MIL-STD-1275D	Including 100V for 50ms
Protection	Reverse Polarity Protection
DC Output	
Output voltage / Current	See table below
Line Load & Temperature regulation	< +/-2%
OVP	Over-Voltage protection on output
Turn on Transient	No turn on transient
Isolation	
Input to Output:	100 V _{DC}
Input to Case:	100 V _{DC}
Output to Case:	100 V _{DC}
Interface	
Control Signals	TTL logic enable
Inhibit Signals	ON/OFF = Open, P.S. is OFF . ON/OFF = GND P.S. is ON (GND is isolated). Pin #37 for input voltage sensing
External Sync	Optional
Environmental	
Operating Temperature	-40°C to +80°C Base plate
Over-Temperature protection	to +100°C with auto recovery at +90°C
Shock & Vibration	per MIL-STD-810E
EMI-RFI	per MIL-STD-461E
Mechanical	
Size L x H x W (mm)	168 x 16 x 116.8
Weight (grams)	430
Cooling	Base plate
Input / Output connector	50 PIN Airborne P/N M55302/61-A50 or Eq.

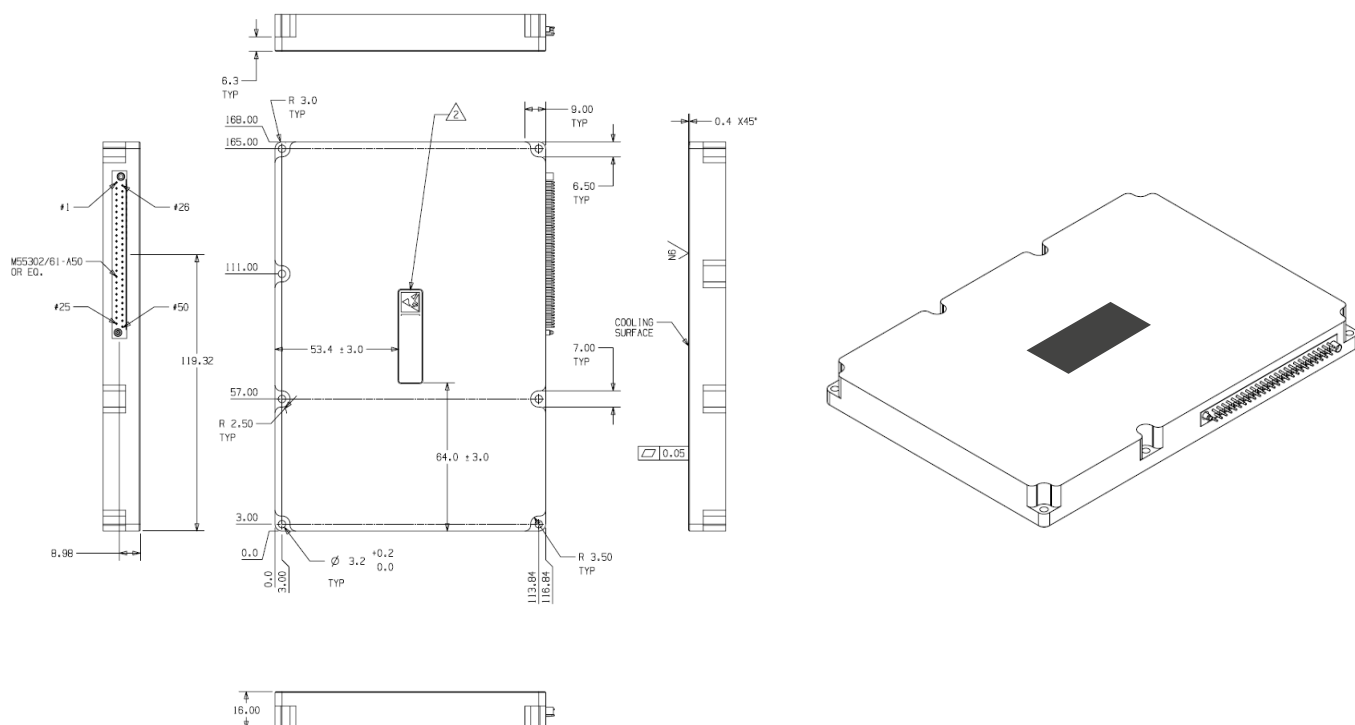
Ordering Information

MODEL #	OUTPUT #	INPUT Voltage (V)	OUTPUT Voltage (V)	OUTPUT Current (A)	PULSE CURRENT (A) For up to 300msec (every 5 seconds)	POWER (W)	PULSE POWER (W) for 300 msec	R&N (mV)
M500SP	1	24	+28	17.5	30	500	840	50

PIN – Assignment

PIN #	PIN Function	PIN #	PIN Function	PIN #	PIN Function
1	VIN	18	Not connected	35	PS_ON_RTN
2	VIN	19	Not connected	36	SYNC_RTN
3	VIN	20	+28V_RTN	37	IVS
4	VIN	21	+28V_RTN	38	Not connected
5	VIN	22	+28V_RTN	39	Not connected
6	VIN_RTN	23	+28V_OUT	40	Not connected
7	VIN_RTN	24	+28V_OUT	41	Not connected
8	VIN_RTN	25	+28V_OUT	42	Not connected
9	VIN_RTN	26	VIN	43	Not connected
10	GND_EARTH	27	VIN	44	Not connected
11	PS_ON	28	VIN	45	+28V_RTN
12	SYNC	29	VIN	46	+28V_RTN
13	Not connected	30	VIN_RTN	47	+28V_RTN
14	Not connected	31	VIN_RTN	48	+28V_OUT
15	Not connected	32	VIN_RTN	49	+28V_OUT
16	Not connected	33	VIN_RTN	50	+28V_OUT
17	Not connected	34	VIN_RTN		

Outline Drawing



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