OHM
POWER
SOLUTIONS

M520QP

500Watt

One Isolated Output

DC/DC Converter

Features:

- Designed to meet MIL-STD-1275E and MIL-STD-704F
- High Efficiency – up to 92%
- Fully protected for Over Load/Short, Over-voltage and Over-Temperature
- One isolated output
- Base Plate cooling
- No external EMI filter needed
- Option to add additional isolated outputs (up to three) according to customer request

Typical applications:

- Military
- Ruggedized
- Telecom
- Industrial

General specification	
DC Input	
Input voltage range	18-50V_{DC}
Input Per MIL-STD-1275E & MIL-STD-704F	No Damage for transients lower than 12V. Full Operation during Transients: 12V,1 Sec 16V, 30 Sec 100V, 50 msec
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:	200 V_{DC}
Input to Case:	200 V_{DC}
Output to Case:	100 V_{DC}
Interface	
Control Signals	
Inhibit Signals	**ON/OFF (PER OUTPUT):** **ON/OFF** = Open, P.S. is **ON**. **ON/OFF** = GND P.S. is **OFF**.
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-461G: CE102,CS101,CS114,CS115,CS118,RE102,RS103 *50uH LISN with shielded harnesses and static resistive load
Mechanical	
Size L x H x W (mm)	145 x 33 x 120.8
Weight (*grams*)	<1,000
Cooling	Base plate
Input / Output connector	50 PIN D-SUB P/N M24308/2-5F or Eq.

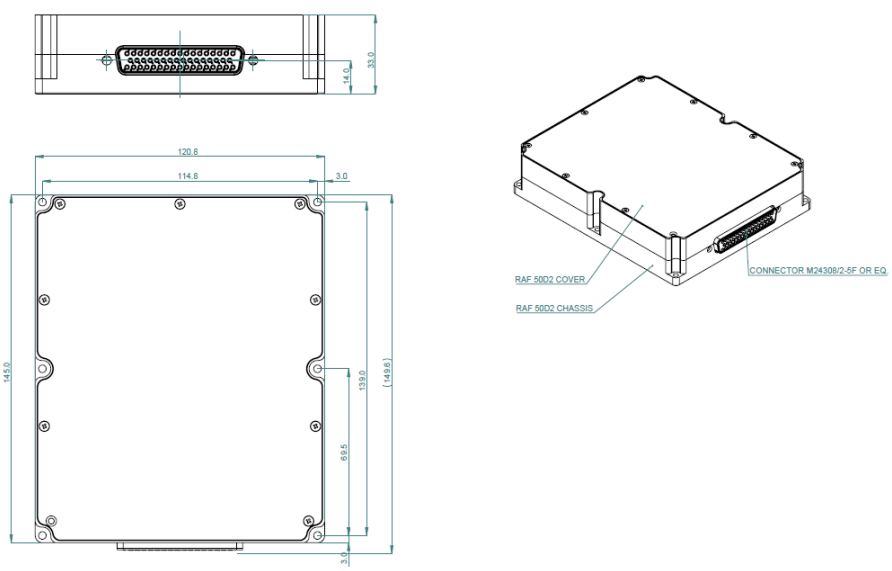
Ordering Information

MODEL #	OUTPUT #	INPUT Voltage (V)	OUTPUT Voltage (V)	OUTPUT Current (A)	POWER (W)	R&N (mV)
M500QP	1	28	+28	17.5	500	50

PIN – Assignment – can be condigured according to customer requirements

PIN #	PIN Function	PIN #	PIN Function	PIN #	PIN Function
1	VIN	**18**	VIN	**35**	VIN
2	VIN	**19**	VIN	**36**	VIN
3	VIN	**20**	VIN	**37**	VIN
4	VIN	**21**	VIN	**38**	VIN
5	VIN	**22**	VIN_RTN	**39**	VIN_RTN
6	VIN_RTN	**23**	VIN_RTN	**40**	VIN_RTN
7	VIN_RTN	**24**	VIN_RTN	**41**	VIN_RTN
8	VIN_RTN	**25**	VIN_RTN	**42**	VIN_RTN
9	VIN_RTN	**26**	VIN_RTN	**43**	N.C
10	OUT1_ON_OFF	**27**	VIN_RTN	**44**	N.C
11	OUT1_ON_OFF_RTN	**28**	N.C	**45**	N.C
12	OUT1_28V_RTN	**29**	N.C	**46**	N.C
13	OUT1_28V_RTN	**30**	N.C	**47**	N.C
14	OUT1_28V_RTN	**31**	N.C	**48**	N.C
15	OUT1_28V_RTN	**32**	OUT1_28V	**49**	N.C
16	OUT1_28V	**33**	OUT1_28V	**50**	N.C
17	OUT1_28V	**34**	VIN		

Outline Drawing



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