

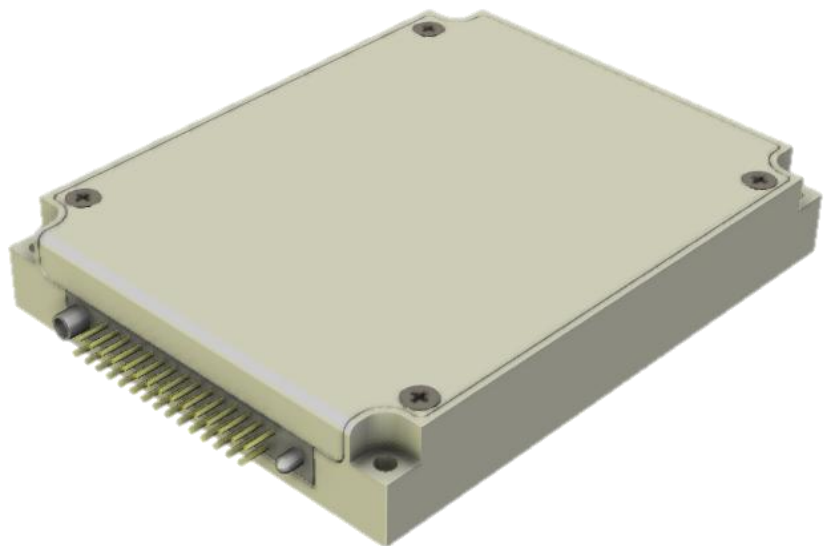


OHM
POWER
SOLUTIONS

M504P

55Watt

**Quad Output Isolated
DC/DC Converter**





Features:

- Designed to meet MIL-STD-810G
- High Efficiency – up to 80%
- 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	18-36V _{DC}
Input Per MIL-STD-1275A	(Including 100V for 50ms – no damage)
Input Per MIL-STD-704A	(Including 80V for 100ms – no damage)
Input Per MIL-STD-704D	Full operation up to 50V
Protection	Reverse polarity protection
DC Output	
Output voltage / Current	See table below
Line Load & Temperature regulation	< +/-2%
Current limit on each output	115% - 145% of rated current
Protection	• Electronic Over-Voltage Protection • Current Limiting Continuous protection for unlimited time with auto recovery • Indefinite short circuit protection with auto recovery
Turn on Transient	No turn on transient
Isolation	
Input to Output:	200 V _{DC}
Input to Case:	200 V _{DC}
Output to Case:	200 V _{DC}
Interface	
Control Signals	TTL logic enable
Inhibit Signals	TTL "1" or OPEN - to turn ON the power supply TTL "0" - to turn OFF the power supply
Signal RTN	Signal RTN Referred To Input For Use As Grounding For INHIBIT Signals
Environmental	
Operating Temperature	-55°C to +85°C Base plate
Over-Temperature protection	to +105°C with auto recovery at +95°C
Shock & Vibration	per MIL-STD-810E
EMI-RFI	per MIL-STD-461E
Mechanical	
Size L x H x W (mm)	71 x 12.5 x 53
Weight (<i>grams</i>)	85
Cooling	Base plate
Input / Output connector	31 PIN Airborne P/N: RM272-030-312-2900 or Eq.

Ordering Information

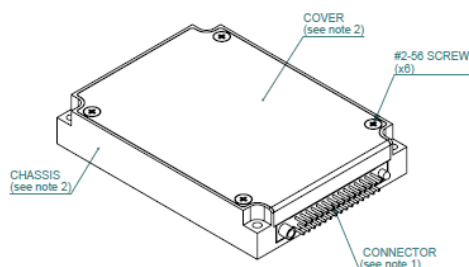
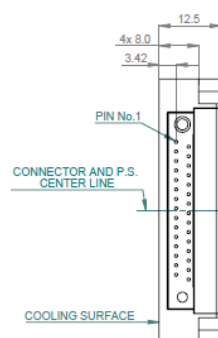
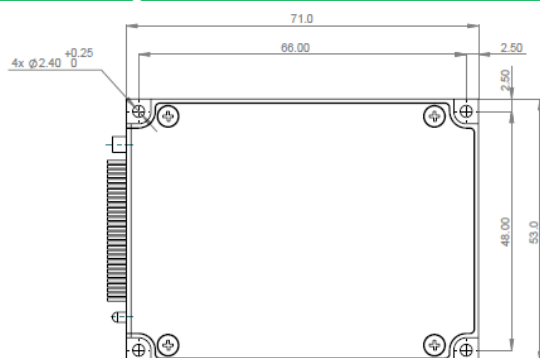
MODEL #	OUTPUT #	INPUT Voltage (V)	OUTPUT Voltage (V)	OUTPUT Current (A)	POWER (W)	POWER TOTAL (W)	R&N (mV)
M504P	A-1	28	3.3	6	18	55	50
	B-2		28	0.5	14		50
	C-3		15	0.5	8		50
	D-4		5	3	15		50
M504P-RF	B-2	28	24	1	24	36	50
	C-2		12	1	12		50

PIN – Assignment

PIN #	PIN Function
1	+15V_C (12V for M504P-RF)
2	+28V_B (24V for M504P-RF)
3	RTN_B
4	-S_3_3V (N.C for M504P-RF)
5	+3_3V_A (N.C for M504P-RF)
6	+3_3V_A (N.C for M504P-RF)
7	+3_3V_A (N.C for M504P-RF)
8	RTN_A (N.C for M504P-RF)
9	RTN_A (N.C for M504P-RF)
10	+5V_D (N.C for M504P-RF)
11	+5V_D (N.C for M504P-RF)
12	RTN_D (N.C for M504P-RF)
13	RTN_D (N.C for M504P-RF)
14	+V _{IN}
15	+V _{IN}

PIN #	PIN Function
16	RTN_C
17	+28V_B (24V for M504P-RF)
18	RTN_B
19	+S_3_3V (N.C for M504P-RF)
20	+3_3V_A (N.C for M504P-RF)
21	+3_3V_A (N.C for M504P-RF)
22	RTN_A (N.C for M504P-RF)
23	RTN_A (N.C for M504P-RF)
24	RTN_A (N.C for M504P-RF)
25	+S_5_DV (N.C for M504P-RF)
26	+S_5_DV (N.C for M504P-RF)
27	INHIBIT
28	SIGN_RTN
29	RTN_V _{IN}
30	RTN_V _{IN}

Outline Drawing



NOTES:

- CONNECTOR: P/N: RM272-030-312-2800 MNF: AIRBORN (OR EQ.)
- HOUSING:
MATERIAL: CHASSIS AL 6061-T851, COVER AL 5052-H32 (OR EQ.)
FINISH: CHEMICAL CONVERSION COATING IAW MIL-DTL-5541F, TYPE I, CLASS 1A
- TOLERANCE: .x ±0.2mm
.xx ±0.12 mm
- WEIGHT: MAX 85 gr

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