



OHM
POWER
SOLUTIONS

M400QD

410Watt

**Quad Output Isolated
DC/DC Converter**





Features:

- Designed to meet MIL-STD-704F & MIL-STD-461E
- High Efficiency – up to 90% (*Full Load @ 25°C*)
- Fully protected for Over Load/Short, Over-voltage and Over-Temperature
- Quad output isolated
- Base Plate cooling
- No external EMI filter needed

Typical applications:

- Military
- Ruggedized
- Telecom
- Industrial





General specification	
DC Input	
Input voltage range	200-350V _{DC}
Input Per MIL-STD-704F	(Including 450V _{DC} for 100ms)
Protection	Reverse Polarity Protection
DC Output	
Output voltage / Current	See table below
Line Load & Temperature regulation	< +/-2%
Current limit on each output	110% - 200% of rated current
OVP	Over-Voltage on each output - Non-latch type
Turn on Transient	No turn on transient
Isolation	
Input to Output:	1000 V _{DC}
Input to Case:	1000 V _{DC}
Output to Case:	100 V _{DC}
Analog GND – Digital GND	50 V _{DC}
Interface	
Serial Communication	I2C - BIT & S/N / VIN IND
Control Signals	TTL - PS TMP FAIL / PS SYNC LOCK / PS VIN FAIL / PS ON/OFF / PS SYNC / PS STATUS
External Sync	Optional
Environmental	
Operating Temperature	-40°C to +71°C Base plate
Over-Temperature protection	at 100°C with auto recovery
Shock & Vibration	per MIL-STD-810F
EMI-RFI	per MIL-STD-461E
Mechanical	
Size	115mm x 90mm x 15.5mm
Weight	280 grams
Cooling	Base plate
Input / Output / Signal connectors	D-TYPE 9 PINS M24308/4-1F or similar
	D-TYPE 25 PINS M24308/4-3F or similar
	D-TYPE 50 PINS M24308/4-3F or similar



Ordering Information

MODEL #	OUTPUT #	INPUT Voltage (V)	OUTPUT Voltage (V)	OUTPUT Current (A)	POWER (W)	POWER TOTAL (W)	R&N (mV)
M400QD	4	310	+3.4	45	153	409.4	20
			+5.2	8	41.6		20
			+12.1	3	36.3		20
			+5.1	35	178.5		20

J1 PIN – Assignment

PIN #	PIN Function
1	+Vin
2	+Vin
3	Not Connected
4	+VinRTN
5	+VinRTN
6	+Vin
7	Not Connected
8	Not Connected
9	+VinRTN

J3 PIN – Assignment

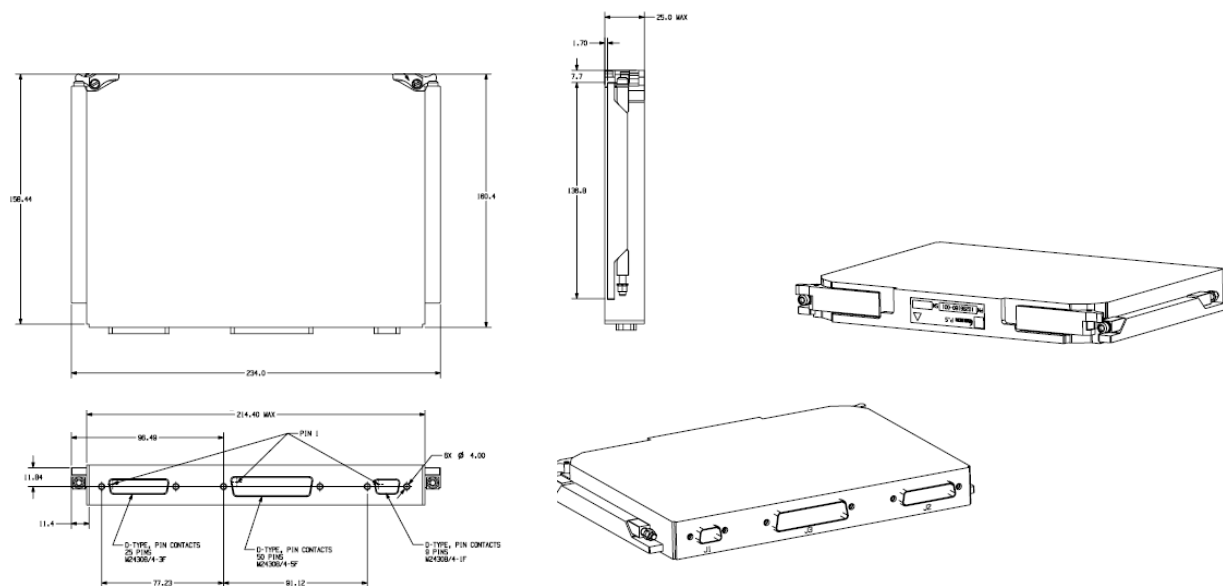
PIN #	PIN Function
1	5V_A
2	5V_A
3	5V_A
4	5V_A
5	5V_A
6	Not Connected
7	Not Connected
8	GND_A
9	GND_A
10	GND_A
11	GND_A
12	GND_A
13	GND_A

PIN #	PIN Function
14	5V_A
15	5V_A
16	5V_A
17	5V_A
18	5V_A
19	Not Connected
20	Not Connected
21	GND_A
22	GND_A
23	GND_A
24	GND_A
25	GND_A

J2 PIN – Assignment

PIN #	PIN Function	PIN #	PIN Function	PIN #	PIN Function	PIN #	PIN Function
1	PS_ON_OFF_P	14	GND_D	27	GND_D	40	3.4V_D
2	PS_ON_OFF_N	15	GND_D	28	GND_D	41	3.4V_D
3	PS_VIN_FAIL	16	12V_D	29	GND_D	42	GND_D
4	PS_TMP_FAIL	17	12V_D	30	GND_D	43	GND_D
5	Not Connected	18	PS_STATUS_P	31	GND_D	44	GND_D
6	3.4V_D	19	PS_STATUS_N	32	GND_D	45	GND_D
7	3.4V_D	20	PS_SYNC_LOCK	33	GND_D	46	GND_D
8	3.4V_D	21	VIN_IND	34	PS_SYNC_P	47	GND_D
9	3.4V_D	22	LOW_PWR_EN	35	PS_SYNC_N	48	5V_D
10	GND_D	23	3.4V_D	36	I2C_SDA	49	5V_D
11	GND_D	24	3.4V_D	37	I2C_SCL	50	5V_D
12	GND_D	25	3.4V_D	38	3.4V_D		
13	GND_D	26	3.4V_D	39	3.4V_D		

Outline Drawing



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