



Enercon Technologies Europe AG

MOTS

CUSTOM

POWER CONVERSION CAPABILITY GUIDE

DC-DC CONVERTERS

AC-DC CONVERTERS

INVERTERS

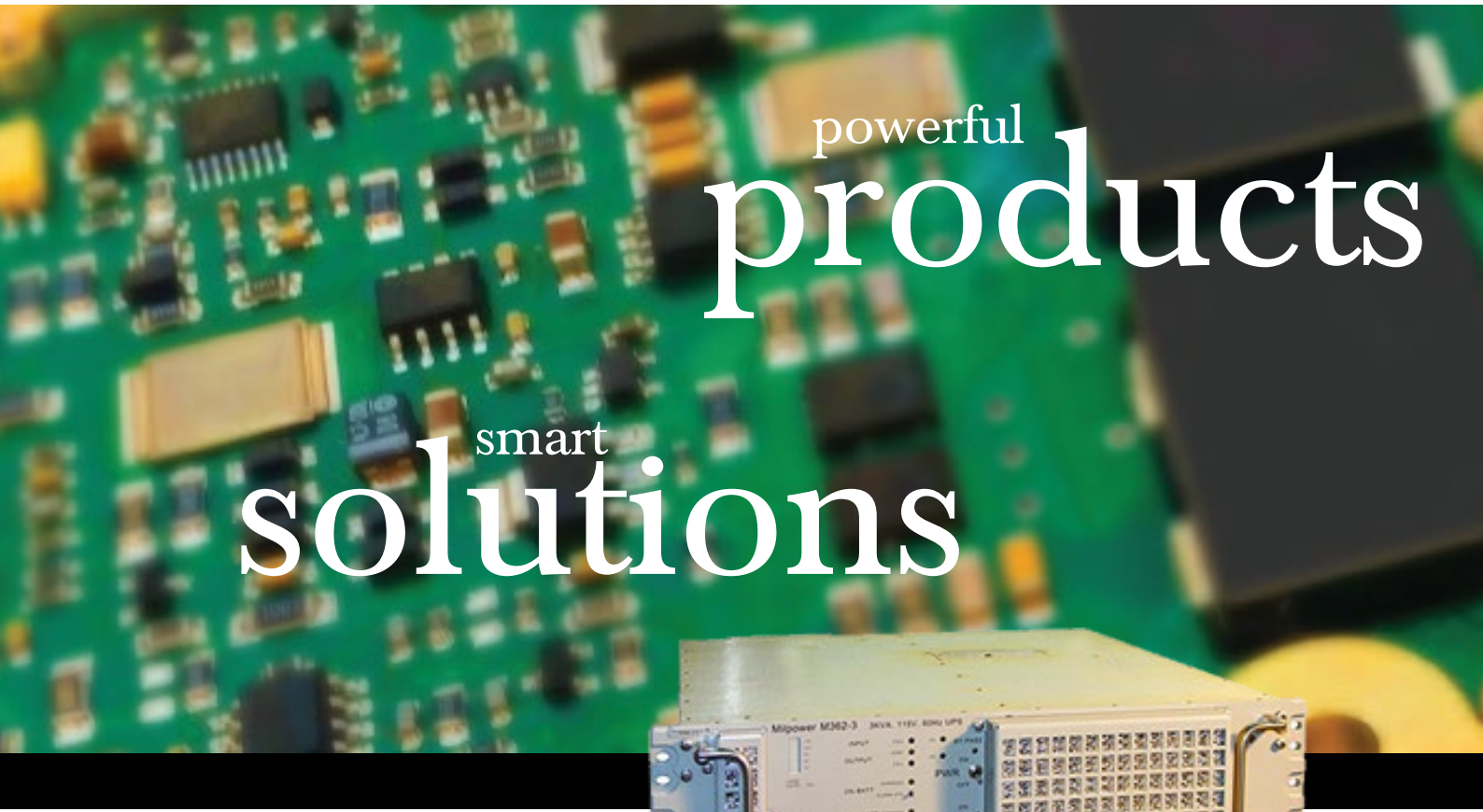
UPS

VPX VITA 62

VME

PDU-SSPC

PER CUSTOMER SPECIFICATION



powerful
products

smart
solutions



All products are designed to comply with or exceed MIL-STD-461, MIL-STD-704 and MIL-STD-810 with MIL-STD-1275 and MIL-STD-1399 optional. All units can be configured or modified to meet your requirements while remaining non-ITAR. See our website for a range of standard product data sheets



For over 30 years, Enercon Technologies Europe AG has been providing MOTS and custom power supplies for military, aerospace, civilian aircraft and the ruggedized commercial marketplace. Enercon is the premier designer and developer of field-proven custom power converters for demanding applications ranging from ground vehicles to airborne and naval platforms:

- Avionics • Military Aircraft • Commercial Aircraft • Radar Arrays • Electronic Warfare • Missiles
- UAVs • Emergency Systems • Surface Ships • Submarines • C4ISR and many more...

We offer a wide variety of MOTS units (DC/DC, AC/DC, DC/AC, GCU and UPS) that are MIL-STD compliant (MIL-STD-704, MIL-STD-461, MIL-STD- 810, MIL-STD-1275 and MIL-STD-1399).

Enercon invites you to engage our highly skilled engineering team to accomplish your power conversion requirements for military, rugged, and critical avionics systems as well as in power, analog, digital, magnetic, RF, thermal and mechanical design techniques. Our engineering team can analyze your power application and suggest custom solutions that will offer better, longer-term durability.

This Capability Guide includes our MOTS units offering hundreds of possibilities for the exact fit for your application. All units can be modified and the customer can define each output, input range, protection limits, and mechanics according to their needs without additional NRE.

DC/DC CONVERTERS [INPUT RANGE 18 - 48V]

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
SINGLE OUTPUT				
50W	M7419	59.7 x 50.8 x 12.5mm	1.8V to 50V	12A
75W	M7009	46.5 x 82.7 x 18.2mm	1.8V to 50V	10A
150W	M7228	70.1 x 111.3 x 15.5mm	2V to 15V	50A
200W	M7318	63.5 x 106.7 x 12.7mm	3.3V to 50V	18A
200W	M6211	70.0 x 111.2 x 15.5mm	1.5V to 50V	60A
400W (500W peak)	M7025	70.0 x 135.0 x 62.0mm	3.3V to 50V	12A
400W (500W peak)	M7225	91.5 x 95.6 x 20.3mm	3.3V to 50V	10A
400W (500W peak)	M7325	85.4 x 116.8 x 20.3mm	3.3V to 50V	50A
400W (500W peak)	M6500	78.7 x 137.2 x 17.0mm	2V to 15V	18A
320W	M4243	88.9 x 141.5 x 27.9mm	270V to 320V	60A
440W (500W peak)	M4244	165.1 x 107.3 x 21.6mm	3.3V to 270V	12A
500W (750W peak)	M7027	70.1 x 134.9 x 20.6mm	18V to 48V	10A
800W (1000W peak)	M7425	117.m x 151.5 x 29.2mm	3.3V to 50V	50A
DUAL OUTPUT				
30W	M2786	45.8 x 54.7 x 12.4mm	Out #1: 2V to 28V Out #2: 2V to 28V	Out #1: 5A Out #1: 5A
60W	M712	75.0 x 75.0 x 18.0mm	Out #1: 2V to 50V Out #2: 2V to 50V	Out #1: 5A Out #1: 5A
80W	M8727	66.0 x 95.m x 12.7mm	Out #1: 2V to 50V Out #2: 2V to 50V	Out #1: 15A Out #1: 15A
125W	M8053 Input 18-70V	65.6 x 128.5 x 15.5mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V	Out #1: 12A Out #1: 12A
150W	M8253	78.7 x 121.2 x 15.5mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V	Out #1: 15A Out #1: 15A
150W	M8263	46.0 x 127.0 x 22.0mm	Out #1: 3.3V to 18V Out #2: 1.2V to 5.5V	Out #1: 10A Out #1: 10A
TRIPLE OUTPUT				
50W	M8737	55.m x 95.3 x 12.7mm	Out #1: 3.3V to 50V Out #2: 3.3V to 50V Out #3: 3.3V to 50V	Out #1: 10A Out #2: 3A Out #3: 1.25A
125W	M8637 Input 18-70V	90.0 x 115.0 x 15.5mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V Out #3: 3.3V to 28V	Out #1: 12A Out #2: 6A Out #3: 6A
125W	M8337 Input 18-70V	90.0 x 120.1 x 15.5mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V Out #3: 3.3V to 28V	Out #1: 12A Out #2: 6A Out #3: 6A
600W	M7338	114.7 x 165.1 x 17.8mm	Out #1: 3.3V to 50V Out #2: 3.3V to 50V Out #3: 3.3V to 50V	Out #1: 20A Out #2: 20A Out #3: 20A

*Customer select (built to order)

DC/DC CONVERTERS [INPUT RANGE 18 - 48V]

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
QUAD OUTPUT				
60W	M714	75.0 x 75.0 x 23.5mm	Out #1: 2V to 50V Out #2: 2V to 50V Out #3: 3.3V to 50V Out #4: 3.3V to 50V	Out #1: 5A Out #2: 5A Out #3: 2A Out #4: 2A
60W	M8149	78.7 x 54.9 x 12.7mm	Out #1: 2V to 30V Out #2: 2V to 24V Out #3: 2V to 24V Out #4: 2V to 24V	Out #1: 2A Out #2: 3A Out #3: 1.25A Out #4: 1.25A
100W	M8747	69.9 x 105.4 x 12.7mm	Out #1: 2V to 50V Out #2: 2V to 50V Out #3: 2V to 24V Out #4: 2V to 24V	Out #1: 18A Out #2: 12A Out #3: 1.25A Out #4: 1.25A
125W	M8647 Input 18-70V	99.0 x 115.0 x 15.5mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V Out #3: 3.3V to 28V Out #4: 3.3V to 30V	Out #1: 12A Out #2: 6A Out #3: 6A Out #4: 3A
150W	M8453	139.7 x 82.55 x 15.5mm	Out #1: 1.8V to 15V Out #2: 1.8V to 15V Out #3: 2V to 24V Out #4: 2V to 24V	Out #1: 18A Out #2: 15A Out #3: 1.25A Out #4: 1.25A
FIVE OUTPUT				
100W	M8757	69.9 x 107.8 x 12.7mm	Out #1: 1.8V to 50V Out #2: 2V to 24V Out #3: 2V to 24V Out #4: 2V to 24V Out #5: 2V to 24V	Out #1: 24A Out #2: 3A Out #3: 1.25A Out #4: 1.25A Out #5: 1.25A
125W	M8657 Input 18-70V	99.0 x 125.0 x 15.5mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V Out #3: 3.3V to 28V Out #4: 3.3V to 28V Out #5: 3.3V to 24V	Out #1: 6A Out #2: 6A Out #3: 6A Out #4: 3A Out #5: 1.5A
SIX OUTPUT				
80W	M8767	63.5 x 92.7 x 12.7mm	Out #1: 3.3V to 100V Out #2: 3.3V to 30V Out #3: 3.3V to 24V Out #4: 3.3V to 24V Out #5: 3.3V to 24V OUT#6: 3.3V to 24V	Out #1: 1.25A Out #2: 1.25A Out #3: 3A Out #4: 1.25A Out #5: 1.25A Out #6: 3A
125W	M736	99.06 X 99.06 X 25.4mm	Out #1: 1.2V to 5V Out #2: 1.2V to 5V Out #3: 1.2V to 5V Out #4: 1.2V to 5V Out #5: 3.3V to 15V OUT#6: 12V to 28V	Out #1: 8A Out #2: 6A Out #3: 6A Out #4: 6A Out #5: 3A Out #6: 1.5A
125W	M8667 Input 18-70V	99 x 125.0 x 15.5mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V Out #3: 3.3V to 28V Out #4: 3.3V to 28V Out #5: 3.3V to 24V OUT#6: 3.3V to 24V	Out #1: 6A Out #2: 6A Out #3: 6A Out #4: 3A Out #5: 1.25A Out #6: 1.25A
1kW	M4068 Input 18-70V	233.17 X 156.72" X 19.3mm	Out #1: 3.3V Out #2: 5V Out #3: 12V Out #4: 12V Out #5: 12V OUT#6: 12V	Out #1: 10A Out #2: 10A Out #3: 40A Out #4: 40A Out #5: 1A Out #6: 1A
EIGHT OUTPUT				
145W	M802 Input 18-70V	104.1 x 129.5 x 15.5mm	Out #1: 1.8V to 50V Out #2: 1.8V to 50V Out #3: 1.8V to 50V Out #4: 1.8V to 28V Out #5: 1.8V to 28V OUT#6: 1.8V to 50V OUT#7: 1.8V to 50V OUT#8: 1.8V to 50V	Out #1: 6A Out #2: 6A Out #3: 6A Out #4: 9A Out #5: 9A Out #6: 6A Out #7: 2A Out #8: 2A

DC/DC CONVERTERS [INPUT RANGE 18 - 48V]

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
EIGHT OUTPUT				
145W	M814	83.8 x 165.1 x 15.5mm	Out #1: 1.8V to 50V Out #2: 1.8V to 50V Out #3: 1.8V to 50V Out #4: 1.8V to 28V Out #5: 1.8V to 28V Out #6: 1.8V to 50V Out #7: 1.8V to 50V Out #8: 1.8V to 50V	Out #1: 12A Out #2: 6A Out #3: 6A Out #4: 3A Out #5: 3A Out #6: 3A Out #7: 3A Out #8: 3A
150W	M811	159.10 X 83.82 X 15.49mm	Out #1: 1.8V to 50V Out #2: 1.8V to 50V Out #3: 1.8V to 50V Out #4: 1.8V to 50V Out #5: 1.8V to 50V Out #6: 1.8V to 50V Out #7: 1.8V to 50V Out #8: 1.8V to 50V	Out #1: 2A Out #2: 3A Out #3: 3A Out #4: 5A Out #5: 8A Out #6: 4A Out #7: 2A Out #8: 2A
360W	M821	200 X 83.82X 15.49mm	Out #1: 3.3V to 15V Out #2: 3.3V to 15V Out #3: 3.3V to 15V Out #4: 3.3V to 15V Out #5: 3.3V to 15V Out #6: 1.2V to 15V Out #7: 1.2V to 15V Out #8: 1.2V to 15V	Out #1: 7A Out #2: 2A Out #3: 4A Out #4: 4A Out #5: 3A Out #6: 10A Out #7: 15A Out #8: 15A
NINE OUTPUT				
250W	M635 Input 18-70V	119.9 x 199.4 x 20.5mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V Out #3: 3.3V to 28V Out #4: 3.3V to 28V Out #5: 3.3V to 28V Out #6: 3.3V to 50V Out #7: 1.8V to 50V Out #8: 1.8V to 50V Out #9: 1.8V to 50V	Out #1: 10A Out #2: 5A Out #3: 5A Out #4: 5A Out #5: 5A Out #6: 5A Out #7: 5A Out #8: 5A Out #9: 5A
TEN OUTPUT				
150W	M8110	129.5 X 104.1 X 15.5mm	Out #1: 1.8V to 50V Out #2: 1.8V to 50V Out #3: 1.8V to 50V Out #4: 1.8V to 50V Out #5: 1.8V to 50V OUT#6: 3.3V to 50V OUT#7: 1.8V to 50V OUT#8: 1.8V to 50V Out #9: 1.8V to 50V Out #10: 1.8V to 50V	Out #1: 2A Out #2: 5A Out #3: 5A Out #4: 2.5A Out #5: 2.5A Out #6: 0.7A Out #7: 2.5A Out #8: 5A Out #9: 2A Out #10: 2A

DC/DC CONVERTERS [INPUT RANGE 220V-350V]

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
SINGLE OUTPUT				
200W	M6201	76.2 x 110.9 x 15.5mm	1.8V to 28V	36A
350W (500W peak)	M6204	88.9 x 137.2 x 19.0mm	1.8V to 28V	50A
500W	M1115	88.9 x 150.9 x 29.9mm	5V to 40V	40A
1000W	M183	163.3 x 94 x 38.1mm	3.3V to 48V	55A
2000W	M186	175.2 x 147.6 x 40.7mm	3.3V to 48V	80A

AC/DC CONVERTERS - SINGLE PHASE INPUT

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
SINGLE OUTPUT				
200W	M1981	116.8 x 157.5 x 20.0mm	3.3V to 48V	20A
500W	M916	127.0 x 203.2 x 22.9mm	3.3V to 48V	50A
1000W	M169	139.9 x 249.9 x 25.4mm	3.3V to 270V	105A
QUAD OUTPUT				
150W	M185	208 x 161.1 x 20.5mm	Out #1: 3.3V to 24V Out #2: 3.3V to 24V Out #3: 3.3V to 28V Out #4: 1.8V to 15V	Out #1: 5A Out #2: 5A Out #3: 10A Out #4: 40A

AC/DC CONVERTERS - TRIPLE PHASE INPUT

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
SINGLE OUTPUT				
400W	M174	167.64 X 143.76 X 27.94mm	3.3V to 48V	80A
500W	M1115	88.9 x 150.9 x 29.9mm	5V to 40V	40A
1000W	M183	94.0 x 163.6 x 38.1mm	3.3V to 48V	55A
1500W	M286	225.0 x 160.0 x 48.3mm	3.3V to 48V	60A
2000W	M186	147.6 x 175.2 x 40.7mm	3.3V to 48V	80A
2000W	M251	138.4 x 163.8 x 36.8mm	270V to 330V	7A
SINGLE/DUAL OUTPUT				
90W	M914	125.0 x 70.0 x 38.0mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V	Out #1: 8A Out #2: 8A
QUAD OUTPUT				
460W	M199	212.7 x 149.9 x 29.2mm	Out #1: 1.8V to 15V Out #2: 1.8V to 15V Out #3: 1.8V to 24V Out #4: 1.8V to 24V	Out #1: 60A Out #2: 20A Out #3: 5A Out #4: 5A
FIVE OUTPUT				
300W	M191	152.4 x 127.0 x 31.8mm	Out #1: 3.3V to 12V Out #2: 3.3V to 12V Out #3: 3.3V to 25V Out #4: 3.3V to 15V Out #5: 3.3V to 25V	Out #1: 15A Out #2: 15A Out #3: 4A Out #4: 4A Out #5: 9A
SIX OUTPUT				
500W	M4066	233.35 X 168.36 X 24.64mm	Out #1: +15V Out #2: - 15V Out #3: +8V Out #4: - 8V Out #5: +5V Out #6: - 5V	Out #1: 12A Out #2: 12A Out #3: 10.5A Out #4: 0.75A Out #5: 30A Out #6: 1.5A
SEVEN OUTPUT				
300W	M391	152.4 X 147.0 X 31.75mm	Out #1: 3.3V to 28V Out #2: 3.3V to 28V Out #3: 3.3V to 13V Out #4: 3.3V to 13V Out #5: 3.3V to 13V Out #6: 3.3V to 12V Out #7: 3.3V to 12V	Out #1: 10A Out #2: 10A Out #3: 3A Out #4: 3A Out #5: 3A Out #6: 15A Out #7: 15A

DC/AC INVERTERS [INPUT RANGE 18 - 70V]

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
SINGLE PHASE - SINGLE OUTPUT				
100VA	M4242	87.5 x 87.5 x 34.0mm	26VAC to 115VAC	2.3A
350VA (500VA peak)	M4252	165.1 x 177.8 x 21.6mm	75VAC to 115VAC	4.3A
TRIPLE PHASE - SINGLE OUTPUT				
1050VA (1500VA peak)	M4252	165.1 x 177.8 x 21.6mm Connection of 3 M4252 Single phase units	75VAC to 115VAC	4.3A

DC/DC PC BOARD UNITS [INPUT RANGE 18 - 48V]

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
SINGLE OUTPUT				
15W	M7117	55.0 X 30.0 X 12.4mm	1.8V to 48V	4A
50W	M7119	50.5 x 50.5 x 12.5mm	1.8V to 50V	8A
DUAL OUTPUT				
6W	M7878	35.0 x 35.0 x 12.5mm	Out #1: 3.3V to 15V Out #2: 3.3V to 15V	Out #1: 0.25A Out #2: 0.25A
6W	M7879	50.0X 26.0 X 12.5mm	Out #1: 3.3V to 15V Out #2: 3.3V to 15V	Out #1: 0.25A Out #2: 0.25A
30W	M786	50.5 X 50.5 X 12.5mm	Out #1: 1.8V to 50V Out #2: 1.8V to 50V	Out #1: 4A Out #2: 4A
TRIPLE OUTPUT				
20W	M647	65.0 x 50.5 x 13.0mm	Out #1: 2.5V to 28V Out #2: 2.5V to 28V Out #3: 2.5V to 28V	Out #1: 2A Out #2: 2A Out #3: 2A
QUAD OUTPUT				
80W	M7874	74.9 x 61.0 x 13.1mm	Out #1: 1.8V to 28V Out #2: 1.8V to 28V Out #3: 1.8V to 50V Out #4: 3.3V to 24V	Out #1: 5A Out #2: 5A Out #3: 3A Out #4: 1.25A
FIVE OUTPUT				
40W	M7159 Input 24-32V	60.0 X 30.5 X 9.8mm	Out #1: 5V to 15V Out #2: 1V to 3.3V Out #3: 3.3V to 24V Out #2: 3.3V to 24V Out #3: 3.3V to 24V	Out #1: 3A Out #2: 3A Out #3: 0.4A Out #2: 0.4A Out #3: 0.4A

AC/DC PC BOARD

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
TRIPLE OUTPUT				
100W	M7311	90.0 X 60.0 X 20mm	Out #1: 1.8V to 15V Out #2: 1.8V to 15V Out #3: 1.8V to 24V	Out #1: 60A Out #2: 20A Out #3: 5A

DC/DC NON FLOTING UNITS

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
800W	M7048	91.95 X 91.95 X 40.9mm	28V to 32V	37A

AC/AC NON FLOATING UNIT

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	MAX CURRENT*
650W	M495	114.8 X 99.8 X 39.9mm	18V to 32V	36A

DC/DC HOLD UP UNITS | FOR USE IN FRONT OF PTE DC/DC UNITS

HOLDUP TIME AND POWER	MODEL	DIMENSIONS	COMMENTS
150W- 10ms	M250	65.0 x 88.0 x 14.0mm	External capacitor can be added to increase power
No internal capacitor	M255	65 x 54.6 x 14.0mm	External capacitor can be added to increase power
100W- 50ms	M256	115 X 115 X 14.0mm	External capacitor can be added to increase power
400W- 50ms	M275	177.8 X 114.3 X 45.72mm	

VPX VITA 62 DC/DC CONVERTER

POWER	MODEL	DIMENSIONS	VOLTAGE RANGE*	COMMENTS
380W	M4064	VPX VITA 62 3U	Output #VS1: 12V_Aux: 12V up to 17A with sense 12V up to 1.5A Output #VS2: 3.3V up to 25A with sense Output #VS3: 5V up to 30A with sense 3.3V_Aux: 3.3V up to 5A -12V_Aux: -12V up to 1.5A VBat: 3.3V/400mA	*outputs VS1, VS2 and 12V_Aux can provide 200W max together, VS2 and 3.3V_Aux can provide 180W max together.
500W	M4066	VPX VITA 62 6U	Output #VS1: +15V/12V- with sense Output #VS2: -15V/12A- with sense Output #VS3: +8V/10.5A- with sense Output #VS4: -8V/0.75A - with sense Output #VS5: +5V/30A- with sense Output #VS6: -5V/1.5A- with sense	Output voltages can be modified.
1000W	M4068	VPX VITA 62 6U	Output #VS1: 3.3V/10A, 3.3V_Aux +Sense Output #VS2: 5V/10A, P03 +Sense Output #VS3: 12V/40A, P01 Current share +Sense Output #VS4: 12V/40A, P02 Current share +Sense Output #VS5: +12V/1A, 12V_Aux Output #VS6: -12V/1A, -12V_Aux	Output voltages can be modified.
600W	M4065	VPX VITA 62 3U	Output #VS1: 12V/30A Output #VS2: 3.3V/20A Output #VS3: 5V/30A Output #VS4: 12V/1A, 12V_Aux Output #VS5: -12V/1A, -12V_Aux Output #VS6: 3.3V/5A, 3.3V_Aux	Output voltages can be modified.

SHIPBOARD UPS

POWER	MODEL	SIZE	BACKUP TIME	COMMENTS
2.0KW / 2.5KVA	M359	19", 3U	10 minutes at 1.5KW	Full compliance with MIL-STD-1399 section 300B Complies with MIL-S-901D
2.5KW / 3KVA	M362	19", 3U	130 minutes at 1KW 48 minutes at 2.4KW	External battery pack. Full compliance with MIL-STD-1399 section 300B Complies with MIL-S-901D



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