

MIL-COTS DC-DC's, Filters & Surge Protection

15.5 - 40 VDC Input / 5 - 50 Watts



MTF50

- 50 Watt MIL-STD filter
- 10 - 40 VDC input
- DEF-STAN 59-411 & 61-5
- MIL-STD 461G, 1275A-E
- MIL-STD 704A-F, 810G

OPTIONAL



MTH100

- Increase hold up time
- 10 A output current
- 10 - 40 VDC input
- User programmable
- 98% efficiency



MTC05-35

- 5 - 35 Watts
- 10 - 40 VDC input
- Single & dual output
- MIL-STD 461G, 1275A-E
- MIL-STD 704A-F, 810G

10 - 40 VDC Input / Up to 75 Watts



DSF100

- 100 Watt MIL-STD filter
- Up to 3.7 A output
- DEF-STAN 59-411 & 61-5
- MIL-STD 461G, 1275A-D
- MIL-STD 704A-F, 810G

OPTIONAL



MTH100

- Increase hold up time
- 10 A output current
- 10 - 40 VDC input
- User programmable
- 98% efficiency



MTC75

- 75 Watts
- 10 - 40 VDC input
- Single & dual output
- MIL-STD 461G, 1275A-E
- MIL-STD 704A-F, 810G

10 - 40 VDC Input / Up to 150 Watts



DSF200LV / DSF226

- 200 Watt MIL-STD filter
- Up to 3.7 A output
- DEF-STAN 59-411
- DEF-STAN 61-5 & pt.6 Iss.6
- MIL-STD 461G, 1275A-E*
- MIL-STD 704A-F, 810G

OPTIONAL



MTH100

- Increase hold up time
- 10 A output current
- 10 - 40 VDC input
- User programmable
- 98% efficiency



MTC150

- 150 Watts
- 10 - 40 VDC input
- Single & dual output
- MIL-STD 461G, 1275A-E
- MIL-STD 704A-F, 810G

10 - 33 VDC Input / Up to 400 Watts



FS0461

- 500 Watt MIL-STD filter
- Up to 28 A output
- 0 - 100 VDC input
- DEF-STAN 59-411
- MIL-STD 461G
- Passive EMI filter



DSF500

- 500 Watts
- Up to 28 A output
- DEF-STAN 61-5
- MIL-STD 1275A-E
- MIL-STD 704A-F, 810G



QSB300-400

- 300-400 Watts
- 9-36 VDC input
- MIL-STD 461G, 1275A-E
- MIL-STD 704A-F, 810G

Designed for vetronic & avionic use (MIL-STD 461G, 1275A-E, 704A-F & 810G, DEF-STAN 59-411 & 61-5)

Commercial off-the-shelf (COTS) is a term for components which are manufactured commercially, readily available, and are non-development items. This term is most often used in defense systems. COTS systems are in contrast to systems that are produced entirely and uniquely for the specific application and therefore offer potentially large cost and time savings.

DC-DC Converters

Space Required	Series	Output Power	Input Range	Surge Input	Output Voltage	Inhibit	Sync	Voltage Trim	Overtemp. Warning	Current Share	MIL-STD 461G	DEF-STAN 59-411	MIL-STD 704A	MIL-STD 704B-F	MIL-STD 1275A-E	DEF-STAN 61-5
Mini 5W (1.26 x 0.76 x 0.34 in) (32 x 19.3 x 8.7 mm)	MTC05	5 W	15-40V	50V	3.3-28V	●	●	●	●		▲	▲	▲	●	▲	▲
Mini 15W (1.58 x 1.02 x 0.38 in) (40.0 x 26.0 x 9.7 mm)	MTC15	15 W	15-40V	50V	3.3 - 28V ±12 - ±15	●	●	●	●		▲	▲	▲	●	▲	▲
Mini 35W (2.28 x 1.81 x 0.50 in) (58.0 x 46.0 x 12.7 mm)	MTC30	35 W	15-40V	50V	3.3 - 28V ±12 - ±15	●	●	●	●		▲	▲	▲	●	▲	▲
Standard 2 x 1 in (2.00 x 1.00 x 0.40 in) (50.8 x 35.4 x 10.2 mm)	MTC35	35 W	10-40V	50V	3.3 - 28V ±12 - ±15	●	●	●	●	●	▲	▲	▲	●	▲	▲
1/4 Brick (2.28 x 1.45 x 0.50 in) (57.9 x 36.8 x 12.7 mm)	MTC50	50 W	10-40V	50V	3.3 - 28V ±12 - ±15	●	●	●	●	●	▲	▲	▲	●	▲	▲
1/2 Brick (2.40 x 2.28 x 0.50 in) (61 x 57.9 x 12.7 mm)	MTC75	75 W	10-40V	50V	3.3 - 28V ±12 - ±15	●	●	●	●	●	▲	▲	▲	●	▲	▲
1/2 Brick (2.40 x 2.28 x 0.50 in) (61 x 57.9 x 12.7 mm)	MTC150	150 W	10-40V	50V	3.3 - 28V ±12 - ±15	●	●	●	●	●	▲	▲	▲	●	▲	▲
1/2 Brick (2.40 x 2.28 x 0.50 in) (61 x 57.9 x 12.7 mm)	QSB300	300 W	9-36V	N/A	5-48V	●		●			▲	▲	▲	▲	▲	▲
Full Brick (4.60 x 4.00 x 0.50 in) (116.8 x 101.6 x 12.7 mm)	QSB400	400 W	9-36V	N/A	5-48V	●		●		●	▲	▲	▲	▲	▲	▲

● Compliant ▲ Compliant with MTF50 or DSF series modules

Filters and Surge Protection Modules

Space Required	Series	Output Power/ Current Rating	Steady State Input Range	Inhibit	Overtemp. Protection	Reverse Voltage Protection	MIL-STD 461G	DEF-STAN 59-411	MIL-STD 704A-F	MIL-STD 1275A-E	DEF-STAN 61-5	DEF-STAN 61-5 P6 Issue 6
Mini Filter (1.57 x 1.25 x 0.51 in) (39.9 x 31.9 x 12.9 mm)	DSF100	100 W / 3.7 A	10 - 33V	●	●	●	●	●	●	■	●	
Mini Filter (1.57 x 1.02 x 0.50 in) (40.0 x 26.0 x 12.7 mm)	MTF50	50 W	10 - 40V	●	●		●	●	●	●	●	
1/4 Brick (2.41 x 1.45 x 0.51 in) (61 x 57.9 x 12.9 mm)	DSF200LV / DSF226	7 A 200 W	10 - 33V 15 - 33V	● ●	● ●	● ●	● ●	● ●	● ●	■ ■	● ●	●
1/2 Brick (2.28 x 2.28 x 0.51 in) (57.9 x 57.9 x 12.9 mm)	DSF500	500 W / 28 A	10 - 33V	●	●	●			●	●	●	
1/2 Brick (2.28 x 2.28 x 0.51 in) (57.9 x 57.9 x 12.9 mm)	FS0461	500 W / 28 A	10 - 33V				●	●				

Note: When selecting input filter for DC-DC converter, consider minimum input voltage and DC-DC efficiency - consult XP Power for assistance
Please review full product data sheets and application notes in conjunction with this selector guide

■ Limited to A-D* ● Compliant

For full specifications visit: www.xppower.com 2018

18.5 to 34 VDC Input/400 to 600 Watts Configurable



MCC400 & MCC600

- 400 Watts regulated output
- Optional 200 Watt non-regulated conditioned rail
- 1 to 4 configurable outputs
- MIL-STD-1275 and DEF-STAN 61-5
- MIL-STD-461 and DEF-STAN 59-411
- Low profile
- Rugged construction meets MIL-STD-810F
- 3 year warranty

Defense AC-DC 65 to 100 Watts Desktop



MCS65 & MCS100

- Rugged desktop design
- 65 & 100 Watts convection cooled
- IP67 ingress protection
- Wide operating temperature range from -40°C to +70°C
- MIL-STD-461G
- MIL-STD-810G
- <0.5 Watts no load input power
- 3 year warranty

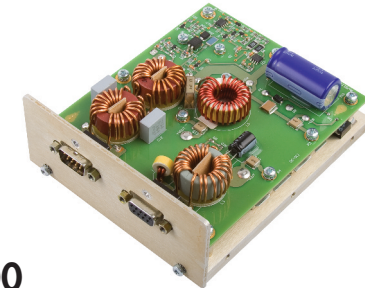
Customer Requirement

Defense vehicle control system

Customer Requirement: 200 W DC-DC converter with high power density, suitable for high levels of shock generated by tracked vehicle motion and gunfire, power is a vehicle 28 VDC source that has high levels of voltage surges, ripples and spikes.



The XP Power Solution



MCA200

- 200 Watts
- DEF-STAN 61-5 part 6 issue 6
- DEF-STAN 59-411 land class A
- MIL-STD-1275
- MIL-STD-461
- MIL-STD-810G
- Convection cooled
- 3 year warranty

Solution: The input filtering was adapted from a previous design to provide protection from surges and spikes, as well as high performance EMI filtering to meet MIL-STD 461E RE, CE, RS and CS requirements. This conditioned power is fed to multiple DC-DC converters in order to provide isolation, regulation and transformation from the 28 VDC input to lower voltages required.

Whatever the system power requirements, we offer cost effective, application specific solutions that meet your unique requirements – Contact sales for more information.