

AC, DC and Custom Power Supplies



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High Efficiency Power Solutions



DC-DC CONVERTERS



Range	Power	Amps Max / Outputs	Input Range	Output (VDC)	Dimensions H x W x D mm (inches)
F501	500W	40	36-75	48, 28, 24, 15, 12	116 x 61.0 x 12.7 (4.6 x 2.4 x 0.5)
F501	500W	40	18-36	48	116 x 61.0 x 12.7 (4.6 x 2.4 x 0.5)
F501	450W	37.5	18-36	28, 24, 15, 12	116 x 61.0 x 12.7 (4.6 x 2.4 x 0.5)
F351	350W	30	11-18	48, 42, 28, 24, 15, 12	116 x 61.0 x 12.7 (4.6 x 2.4 x 0.5)

The patented technology of the POWERSTAX F501 series provides 500W of power with outstanding power density (90W/inch³ / 5.5W/cm³) and exceptional efficiency of up to 90% in a compact, industry standard 'full brick' size package.

With a comprehensive range of features and functions, the versatile F501 is also available as a STEP-UP converter, boosting output voltage from a lower input e.g. 12V input up to a higher output e.g. 28V. International safety approvals include UL60950-1.



AC-DC CONVERTERS (PFC)

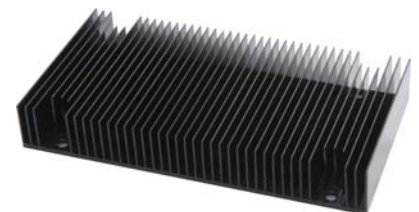
Range	Power	Input Range	Output (VDC)	Dimensions H x W x D mm (inches)
FP10	1000W	180-264VAC	380	116 x 61.0 x 12.7 (4.6 x 2.4 x 0.5)
FP06	600W	85-264VAC	380	116 x 61.0 x 12.7 (4.6 x 2.4 x 0.5)

The FP Series of power modules are a range of high performance Power Factor Correction AC-DC converters. The converters have been developed to provide front-end power conditioning for high input voltage DC-DC modules and incorporate surface mount technology to achieve high power density and reliability.



ACCESSORIES

POWERSTAX can provide a wide range of accessories to ensure optimum integration of the DC-DC converters into your power system. Accessories include filters, terminal adaptors and heat sinks.



POWERSTAX offer a full range of high efficiency DC-DC converters from miniature point-of-load modules of 0.25W to complete DC power systems of 6000W.

1U AC-DC BULK POWER SYSTEMS



POWERSTAX's range of 1U, high power density bulk power front ends are designed to fit a 19" rack for compact, flexible, scalable and cost effective AC-DC power conversion.

Bulk Power Front End 1U Rack

The high power density 1U rack supplies up to 1600W, N+1 redundancy and is stackable up to 4 racks high (4U) providing 9600W of total power. The racks include an I²C interface for control, diagnostics and power management. A digital display and voltage adjustment module is available for the system builder.



Range	Description	N+1 Redundancy	Total Power
R2400	1U, 19" rack for up to 3 x A0800 power cartridges	Yes	2400W
R2250	1U, 19" rack for up to 3 x A0750 power cartridges	Yes	2250W
SCMR	Displays voltage and current per power cartridge	N/A	≤ 12 power cartridges



Bulk Power Front End Cartridges

The range of power factor corrected units provide 750-800W with a wide range of outputs from 24VDC to 56.2VDC and have international safety approval.

Range	Description	Input Voltage	Output Voltage	Power
A0800	800W power cartridge to fit R2400 rack	85-264VAC	48, 54.5 & 56.2VDC	800W
A0750	750W power cartridge to fit R2250 rack	85-264VAC	24 & 28VDC	750W

1U AC-DC 19" RACK MOUNT SINGLE OUTPUT POWER SYSTEM

The POWERSTAX R1801, 1800W front-end power rack is designed to operate as an integral part of a distributed power system. The R1801 incorporates the industry standard 19" format and provides a cost effective solution for the system builder.



Range	Description	Input Voltage	Output Voltage	Total Power
R1801	1U, 19" rack incorporating 3 x A0600 power cartridges	85-264VAC	48, 54.5 & 56.2VDC	1800W

Multistax Series

The Multistax series of power supplies provides up to 1450W of modular and configurable power in a compact 1U (40mm) package.

Employing an innovative plug & play architecture, Multistax units are configured and tested in minutes. Slide-in output converter modules mate with a feature laden front-end input converter.

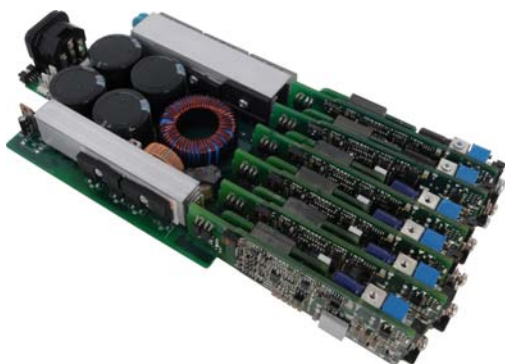
A high efficiency of up to 90% significantly reduces system thermal load and an industry leading 15W/in³ power density provides a compact and versatile power solution.

Range	Model	Slots	Power	Width mm (inches)
MS1U	6A	6	400W	127 (5)
	6B	6	700W	127 (5)
	6C	6	1000W	127 (5)
	6D	6	1200W	127 (5)
	6E	6	1450W	127 (5)
MS1U	4A	4	200W	89 (3.5)
	4B	4	400W	89 (3.5)
	4C	4	600W	89 (3.5)



Medistax Series

Also available is the Medistax series of medically approved power supplies, where all configurations carry full safety agency approvals including UL60601-1, EN60601-1 and CE marks.



Range	Model	Slots	Power	Width mm (inches)
MM1U	6A	6	400W	127 (5)
	6B	6	700W	127 (5)
	6C	6	1000W	127 (5)
	6D	6	1200W	127 (5)
	6E	6	1450W	127 (5)
MM1U	4A	4	200W	89 (3.5)
	4B	4	400W	89 (3.5)
	4C	4	600W	89 (3.5)

Range	Vmin	Vnom	Vmax	I _{max}	Watts
Mx1	1.5	2.5	3.6	50A	125W
Mx2	3.2	5	6	40A	200W
Mx3	6	12	15	20A	240W
Mx4	12	24	30	10A	240W
Mx5	28	48	58	6A	288W
Mx7	5	24	28	5A	120W
Mx8 V1	5	24	28	3A	72W
Mx8 V2	5	24	28	3A	72W

A Multistax range designed specifically for extended temperature applications is also available. This range is fully specified from -20°C to +70°C, with no derating. In addition POWERSTAX can provide a range designed specifically for acoustically sensitive applications and adjustable constant current outputs.

1U AC-DC 19" RACK MOUNT SINGLE & MULTI-OUTPUT POWER SYSTEMS



POWERSTAX offers a 1U, single and multiple output 19" rack mount AC-DC bulk power system. The A3600 provides a flexible AC-DC power solution of up to 3600W in an efficient, versatile and convenient packages for the communications, industrial, transportation, instrumentation and medical markets.



CE marked and with universal mains AC input the POWERSTAX A3600 provides 1 to 18 isolated and adjustable outputs from 1.45VDC to 56VDC. Outputs can be configured to provide custom voltages e.g. in series for higher voltages.

Part Ref	Input Voltages	Typical Output Options	Dimensions H x W x D mm (inches)
A3600	90-253VAC	2.5VDC @ 150A, 5VDC @ 120A, 12VDC @ 60A, 24VDC @ 30A	436 x 351 x 43.7 (17.2 x 13.8 x 1.7)

1U ULTRA COMPACT AC-DC POWER SYSTEMS

The POWERSTAX N Series provides high efficiency (up to 92%), in an ultra low 1U high and compact package making it ideal for applications using industry standard 1U chassis.



The series includes I²C communication for added functionality and monitoring, N+1 redundancy and is available in single (plus standby) and multiple output versions. All products are RoHS compliant.

POWERSTAX offers value added modifications to all models in this range including conformal coating, the addition of metalwork and cover, fan assemblies and

many other special requirements.

Range	Description	Power	Dimensions H x W x D mm (inches)
N-0125	125W 1U high ultra compact AC-DC converter	125W	31.8 x 76.2 x 127 (1.25 x 3 x 5)
N-0160	160W 1U high ultra compact AC-DC converter	160W	31.8 x 76.2 x 127 (1.25 x 3 x 5)
N-0275	275W 1U high ultra compact AC-DC converter	275W	38.1 x 76.2 x 127 (1.5 x 3 x 5)
N-0280	280W 1U high ultra compact AC-DC converter	280W	34.3 x 76.2 x 134.6 (1.35 x 3 x 5.3)
N-0375	375W 1U high ultra compact AC-DC converter	375W	38.1 x 84.6 x 127 (1.5 x 3.33 x 5)

- **Defense**
- **Aerospace**
- **Homeland Security**
- **Mobile / Vehicle Equipment**
- **Medical**
- **Industrial & Control Systems**
- **Datacoms / Telecoms**
- **LED Lighting**



The POWERSTAX design and engineering team will design, develop and supply value-added and custom power solutions to meet your exact needs.

POWERSTAX Engineers possess a wealth of expertise and experience in the research, development and manufacture of both AC and DC power solutions. POWERSTAX operates as an extension to YOUR design team to produce the fastest, most elegant and cost effective solution.

With ISO9001-2008 approval and using advanced computer aided design and development systems, plus in-house production facilities, POWERSTAX offers designs to meet specific EMC / RFI performance, high density and / or low profile packaging and fault tolerant systems including hot swap, warm swap and n+1 redundancy with true power sharing for maximum system reliability.

POWERSTAX provides rapid, comprehensive support for all your technical and commercial issues and our custom power solutions can minimise your power supply development time, reduce your costs and accelerate your time to market.

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