

## **MIL Spec power modules feature output power up to 30W**



Powerstax announces the availability of its PX range of competitively priced, high reliability MIL standard DC:DC converters and pre-regulator, filter and hold-up modules.

Tim Worley, CEO of Powerstax comments; “ Our PX range of power modules offers designers one stop shop for complete board level power solutions.”

The Powerstax PX range of DC:DC converters contains more than 40 products including single, dual and triple output versions with output power up to 30W. All models have an ultra-wide DC input range of 16-40V and output voltages which may be selected as combinations of 5V,  $\pm 12V$ ,  $\pm 15VDC$ . The converters employ fixed high-frequency (400kHz) switching technology with an on-board input EMC filter and built-in soft start circuit. All modules have output short circuit and overload protection.

The Powerstax PX series pre-regulator module operates up to 50W and can extend a DC-DC converter's input voltage range while inhibiting supply rail surges and spikes. The pre-regulator offers three operating modes: Normal mode operation occurs between 16V to 40V input voltage when the module is operating in a steady transparency state. Voltage mode is deployed when the bus voltage falls below 16V putting the voltage regulator module into BOOST mode and raising its output voltage to 20V. Should the input voltage drop below 10V the voltage regulator module will safely shut down. And finally surge and spike suppression mode may be used when the input voltage goes above 39V. The pre-regulator module output voltage is then clamped at 38.5VDC and can withstand the maximum 80V/50ms bus voltage surges and up to 600V/20 $\mu$ s spikes.

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The Powerstax PX series switching regulator modules provide an extended input voltage range to allow extra low voltage outputs from the output of one of the PX series DC:DC converters. Input voltage range is 4.5 – 32VDC with outputs of 2.5, 3.3 or 5VDC as standard.

Providing a hold time 10<sup>2</sup>s/?F the Powerstax PX series hold-up module provides an alternative solution to reduce the amount of capacitance needed by charging the hold up capacitor at high voltage (typical 38VDC) while limiting the input current. This provides enough time to facilitate an orderly system shut-down in the event of a brown-out or complete power failure.

The final modules in the PX series are two EMC filter modules which meet the requirements of MIL-STD-461D, CE102 levels of conducted power line noise.

All PX series modules have an operating temperature range from -55 to +105 °C, employ proven SMT technology offering high reliability, low noise and high power density

Typical applications for the Powerstax PX series include Mil and aviation systems and high reliability industrial applications. Powerstax provides standard and custom power solutions for defence, homeland security, shipboard and ground systems and mobile/vehicle mounted wireless and radar systems, telecomm infrastructure and security systems.

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