

20 Watt DC-DC Converters



XP Power today announced additions to its range of low power metal cased DC-DC converters with the launch of the 20 Watt JCM20 and JTK20 series. Aimed at space constrained portable applications, these highly efficient board mounted converters provide either single or dual regulated outputs from an ultra compact 1 x 1 x 0.39 inch (25.4 x 25.4 x 9.90 mm) package. Achieving an industry leading power density of up to 51 Watts per cubic inch and an efficiency of up to 89%, these tiny units are ideal for applications where PCB space for the converter needs to be kept to the minimum and an industry standard package pinout is required. These products can replace existing 1" x 2" packages thus reducing required board space by 50%.

The JTK20 series accommodates an ultra wide 4:1 range, and is available with either 9 - 36 or 18 - 75 VDC input voltage. With a 2:1 wide input range, the JCM20 series offers three input ranges of 9 - 18, 18 - 36 or 36 - 75 VDC inputs. Single output models provide +3.3, +5, +12 or +15 VDC, while the duals offer +/-5, +/-12 or +/-15 VDC. All outputs are fully regulated to within +/- 0.5% over all input and load conditions for the single output models and less than +/- 1.0% for the dual outputs. Single output models have an output trim that allows adjustment within +/- 10% of nominal output. Input to output and input/output to case isolation of 1,600 VDC is provided across the range.

Able to work in most environments, the JTK20 can operate at full load from -40 to +55 degrees C, and the JCM20 up to +65 degrees C, without the need for any additional heatsinking or forced airflow. With derating the JCM20 can operate up to +100 degrees C, and +105 degrees C for the JTK20.

Both series feature remote on/off control. This can be used to control the output rails or to sequence start-up procedures. All units also feature overvoltage, overload and short circuit protection.

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