Power supplies have a low profile of less than 1U



TDK-Lambda Americas has unveiled its latest addition to its line of AC-DC Medical, ITE (Information Technology Equipment), and Industrial power supplies. The new single-output CSS500 series are 360W to 500W supplies that accept a wide AC input range, have a low profile of less than 1U, and are ideal for applications in medical/dental, industrial automation, business, gaming, point-of-sale and instrumentation equipment, to name a few.

These new power factor corrected power supplies feature a universal 90-264Vac, 47-63Hz input, enabling them to be used anywhere in the world. Plus, these supplies feature a low leakage current of less than 300µA at 264Vac, 63Hz, which is important for many medical and dental applications. In addition, the CSS500 is designed to withstand 4kVac, input-to-output. The series are available with a wide selection of output voltage including: 12V, 24V, 30V, 36V, 48V, 54V, or 57Vdc and have a power-saving operating efficiency of up to 92%.

With convection cooling (no fans required) these supplies provide up to 360-watts of output power. For higher power applications, with forced air cooling of 30CFM or 3.1 m/s, the output power increases to 500-watts. The forced air cooling can be provided by either the user or via an optional fan/cover assembly. The convection cooled version has a U-channel chassis that measures 4.7"W x 8.0"L x 1.5"H. Two optional fan/cover configurations are available; one with the fan mounted on the end of the chassis, and the other with the fan mounted on top of the metal cover. The optional fans are temperature-controlled and will automatically change speed as the output power and temperature varies.

The operating temperature range is from 0° C to $+70^{\circ}$ C, and the output is floating so it can be used as either a positive or negative polarity. Remote On/Off connections are provided to allow for remote control of the supply. Other standard features

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include active-current-share (up to 4 units), internal ORing FET (for fault-tolerant apps), DC Good signal, plus overvoltage, overcurrent and overtemperature protections. In addition, a Fan-Fail signal is provided when the optional fan/cover is ordered.

The CSS500 series have global medical safety agency approvals per UL/IEC60601-1 as well as ITE and general purpose safety agency approvals per UL/EN60950-1, are CE Marked, meet the conducted and radiated EMI requirements of EN55011-B, EN55022-B and FCC Class B (which are much tougher to meet than Class A), and they are RoHS compliant.

These units are available now and economically priced at \$175 each in 100 piece quantities. More information is available at TDK-Lambda's website: http://www.us.tdk-lambda.com/lp/products/css-series.htm [1]

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[1] http://www.us.tdk-lambda.com/lp/products/css-series.htm