

Power Supply Product

Low Acoustic Noise 1500W Medical & ITE Power Supplies Meet Class B Conducted and Radiated EMI

November 2018

TDK Corporation (TSE 6762) announces the introduction of the TDK-Lambda 1500W rated CUS1500M series of AC-DC power supplies. This extends the CUS-M family of products, to now cover 30W to 1500W. The CUS1500M has both medical and ITE (Information Technology Equipment) certifications and is ideally suited for industrial, medical, cosmetic laser treatment and analysis equipment requiring less than 300 μ A earth leakage current, low audible noise and class B EMI.

The 1500W additions are available with 12, 15, 24, 36 and 48V outputs, adjustable from -15/+20% (+15% for the 48V) of nominal. All models accept an 85 to 265Vac input and can operate at full load in -20°C to +50°C ambient temperatures, derating linearly to 60% load from +50°C to +60°C. High operating efficiencies of up to 88% reduce internal waste heat and component temperatures, resulting in electrolytic capacitor service life predictions of at least ten years.

The CUS1500M measures 127 x 63 x 261mm and has a seven-year warranty. Other features include a 5V, 1A standby voltage, remote on/off, parallel operation of up to five units, an isolated open collector DC good / fan fail signal and a variable speed fan that produces 45dBA (typical) at 30°C at 70% load.

To facilitate safe and easy installation, output cable connections are made to screw terminal blocks with covers rather than bus bars. The terminal block can also be quickly configured for either a vertical or horizontal wiring orientation.

The TDK-Lambda CUS1500M models are certified to the safety standards of IEC/ES/CSA/EN 60601-1, IEC/UL/CSA/EN 60950-1 (62368-1 pending), IEC/EN 62477-1 (OVC III), and are CE marked according to the Low Voltage, EMC and RoHS2 Directives. Input to output isolation is 4,000Vac (2 x MoPP), input to ground 2,000Vac (1 x MoPP) and 1,500Vac output to ground (1 x MoPP) for suitability with B and BF rated equipment. All models offer conducted and radiated performance to EN55011/EN55032-B, meet EN 61000-3-2 harmonics and are compliant to EN 61000-4 and EN 60601-1-2 (Edition 4) immunity standards.

More information can be obtained at the following TDK-Lambda Americas webpage, <https://us.tdk-lambda.com/lp/products/cus-m-series.htm>, or by calling 800-LAMBDA-4. Product availability for all the RWS-B power supplies can be found via the link to TDK-Lambda's distributor network (see "Check Distributor Stock") at <https://www.us.tdk-lambda.com/lp/>.

Major applications

Industrial, medical, cosmetic laser treatment and analysis equipment requiring less than 300 μ A earth leakage current, Class B EMI and low acoustic noise.

Main features and benefits

- Seven year warranty
- IEC 60601-1 / 60950-1 safety certification
- Compact case size
- Class B conducted and radiated EMI
- Long service life (conservative electrolytic capacitor ratings)

Major specifications

Model		CUS1500M
Input voltage range	Vac	85 – 265Vac
Output voltages	Vdc	12, 15, 24, 36 and 48V
Output power	W	1500 - 1536W
Safety Certifications	-	IEC / ES / CSA / EN 60601-1, IEC / UL / CSA / EN 60950-1, IEC / EN 62477-1 (OVC III)
EMI	-	Class B radiated and conducted to EN55011 and EN55032
Size (W x L x H)	mm	127 x 63 x 261 mm

About TDK Corporation

TDK Corporation is a leading electronics company based in Tokyo, Japan. It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's portfolio features passive components such as ceramic, aluminium electrolytic and film capacitors, and magnetics, high-frequency, and piezo and protection devices. The product spectrum also includes sensors and sensor systems such as temperature and pressure, magnetic, and MEMS sensors. In addition, TDK provides power supplies and energy devices, magnetic heads and more. These products are marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics and TDK-Lambda. TDK focuses on demanding markets in the areas of information and communication technology and automotive, industrial and consumer electronics. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2018, TDK posted total sales of USD 12 billion and employed about 103,000 people worldwide.

About TDK-Lambda Corporation

TDK-Lambda Corporation, a group company of TDK Corporation, is a leading global power supply company providing highly reliable power supplies for industrial equipment worldwide. TDK-Lambda Corporation meets the various needs of customers with our entire range of activities, from research and development through to manufacturing, sales, and service with bases in five key areas, covering Japan, Europe, America, China, and Asia.

For more details, please pay a visit to <http://www.tdk-lambda.com/>

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