

## Power Supply Product

# Medical / ITE Certified 2x4" Power Supplies Provide Optimum Performance up to 85°C Ambient Temperatures

January 2018

TDK Corporation announces the introduction of the TDK-Lambda brand CUS150M series of AC-DC 150W rated power supplies, with the capability of operating in ambient temperatures of up to 85°C without the need for forced air cooling. Certified to medical and ITE standards for Class I and II (no earth ground connection) operation, the product meets both curve B radiated and conducted emissions. CUS150M target applications include medical, home healthcare, dental, test and measurement, broadcast and industrial equipment.

Initially available with 12V, 24V and 48V outputs, (15V, 18V, 28V and 36V models to follow in Q1 2018), the CUS150M operates from an 85 to 264Vac input and has operating efficiencies up to 91%. Off-load power consumption is less than 0.5W and a 10-12V 0.5A fan supply is fitted as standard. The product warranty is five years.

The open frame version is in the industry standard 50.8 x 101.6mm (2" x 4") footprint with a height of 31.5mm. Convection cooled it can deliver 120W at 40°C, or with forced air cooling 150W at 50°C, 140W at 70°C and 75W at 85°C. With a U-channel construction, measuring 64 x 116 x 38.5mm (WxLxH), the CUS150M can be conduction cooled via a cold plate to deliver 150W at 50°C, 100W at 70°C and 50W at 80°C. Cover or top fan options are also available.

Input to output isolation is 4kVac (2 x MoPP), input to ground 1.5kVac (1 x MoPP) and output to ground 1.5kVac (1 x MoPP) making the series suitable for B and BF rated medical equipment. Touch current is a maximum of 100µA, with leakage current less than 250µA. 5,000m is the maximum operating, transportation and storage altitude.

All the power supplies are certified to IEC/EN/ES/CSA 60601-1 and IEC/EN/UL/CSA 60950-1 with CE marking for the Low Voltage and RoHS2 Directives. Both Class I and Class II versions are compliant to EN 55011-B and EN 55032-B (radiated and conducted) and meet the EN 61000-3-2 harmonics, IEC 60601-1-2 Edition 4 and IEC 61000-4 immunity standards.

More information can be obtained at the following TDK-Lambda Americas website, <http://www.us.tdk-lambda.com/lp/products/cus-m-series.htm>, or by calling 800-LAMBDA-4. Product availability for the CUS150M power supplies can be found via the link to TDK-Lambda's distributor network (see "Check Distributor Stock to Buy") at <http://www.us.tdk-lambda.com/lp/>.

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## Major applications

Medical, home healthcare, dental, test and measurement, broadcast and industrial equipment

## Main features and benefits

- High Efficiency, up to 91%
- Operation up to 85°C Ambient Temperatures
- Industry Standard 2" x 4" Footprint (open frame)
- Class I and II Operation with Class B EMI
- Suitable for B and BF Rated Equipment

## Major specifications

Model		CUS150M
Input voltage range	Vac	85 to 264Vac
Output voltages	Vdc	12, 24, 48V with 15, 18, 28 and 36V to follow
Output power	W	Up to 150W
Operating temperature	°C	-20°C to +85°C. (Derating according to case option and airflow )
Safety	-	IEC/EN/ES/CSA 60601-1, IEC/EN/UL/CSA 60950-1
Size (W x L x H)	mm	50.8 x 101.6 x 31.5 mm (Open frame)
Warranty	-	Five Years

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## 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 includes passive components, such as ceramic, aluminum electrolytic and film capacitors, ferrites and inductors, high-frequency products, and piezo and protection components, as well as sensors and sensor systems and power supplies. These products are marketed under the product brands TDK, EPCOS, Micronas, Tronics and TDK-Lambda. TDK's further main product groups include magnetic application products, energy devices, and flash memory application devices. 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 2017, TDK posted total sales of USD 10.5 billion and employed about 100,000 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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## Contacts for regional media

Region	Contact	Phone	Mail
Americas	Tom Tillman TDK-Lambda Americas	(619) 575 4400	<a href="mailto:tom.tillman@us.tdk-lambda.com">tom.tillman@us.tdk-lambda.com</a>