

Power Supplies

350-500W medical and industrial power supplies deliver up to 1000W peak

July 2021

TDK Corporation (TSE 6762) announces the introduction of the TDK-Lambda brand CUS350MP-1000 AC-DC medical and industrial certified power supplies. Capable of providing 500W with external airflow (1,000W peak), the series is rated at 350W when convection cooled and can deliver peaks of 800W for up to 5s. This makes the CUS350MP-1000 suitable for low audible noise applications requiring occasional high peak power demands, including medical equipment utilizing DC motors and industrial printers. Power supplies with a peak capability can offer cost, size and audible noise reductions over fan cooled models rated for continuous operation at the peak power requirement.

The series is available with 24V, 30V, 36V and 48V outputs, a 5V isolated standby and a remote on/off function. The CUS350MP-1000 has an 85 to 265Vac input range and a leakage current of less than 300 μ A. With efficiencies of up to 94%, operation in ambient temperatures of -20°C to +70°C is possible, derating linearly above 50°C to 30% load. Open frame models measure 88 x 183 x 44mm (W x L x H) with a weight of 770g. Options include a perforated cover, double sided board coating, single input fuse and screw terminations.

The CUS350MP-1000 has an input to output isolation of 4,000Vac (2 x MoPP), input to ground of 1,500Vac (1 x MoPP) and 1,500Vac (1 x MoPP) output to ground for suitability in B and BF rated medical equipment. Safety certifications include IEC/UL/CSA/EN 62368-1, IEC/EN/ES 60601-1, EN 62477-1 (OVC III), with CE marking to the Low Voltage, EMC and RoHS Directives. The units also comply with EN 55011-B and EN 55032-B conducted and radiated emissions, EN 61000-3-2 harmonics, IEC60601-1-2 Edition 4 and IEC 61000-4 immunity standards.

More information can be obtained at the following TDK-Lambda Americas website <https://product.tdk.com/en/power/cus350mp> or by calling 800-LAMBDA-4. Product availability for the CUS350MP-1000 power supplies can be found via the link to TDK-Lambda's distributor network (see "Check Distributor Inventory") at <https://www.us.lambda.tdk.com>.

Main applications

Low audible noise applications requiring occasional high peak power demands, medical equipment utilizing DC motors, industrial printers and ticket dispensers.

Main features and benefits

- Convection cooled rating
- Up to 94% efficient
- Medical Certification (2 x MoPP)
- Compact 88 x 183 x 44mm package

Key data

TDK Corporation

Model		CUS350MP-1000
Input voltage range	Vac	85 - 265
Output voltages	Vdc	24, 30, 36 and 48
Maximum output power	W	350 convection, 500 forced air, up to 1,000 peak
Efficiency	%	Up to 94
Safety Certifications	-	IEC / UL / CSA / EN 60601-1, 62368-1, EN 62477-1 (OVC III)
Size (W x H x D)	mm	88 x 183 x 44 (open frame)

About TDK Corporation

TDK Corporation is a world leader in electronic solutions for the smart society based in Tokyo, Japan. Built on a foundation of material sciences mastery, TDK welcomes societal transformation by resolutely remaining at the forefront of technological evolution and deliberately “Attracting Tomorrow.” It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's comprehensive, innovation-driven portfolio features passive components such as ceramic, aluminum electrolytic and film capacitors, as well as 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 automotive, industrial and consumer electronics, and information and communication technology. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2021, TDK posted total sales of USD 13.3 billion and employed about 129,000 people worldwide.

About TDK-Lambda Corporation

TDK-Lambda Corporation is a trusted, innovative leader and global supplier of highly reliable power conversion products for industrial and medical equipment worldwide.

TDK-Lambda Corporation is aligned for fast responses to any customer need with R&D, manufacturing, sales and service locations in five key geographic regions, namely Japan, EMEA, Americas, China and ASEAN.

For more details, please pay a visit to: www.jp.lambda.tdk.com/en/

Contacts for regional media

Region	Contact	Phone	Mail
Americas	Tom Tillman TDK-Lambda Americas	(619) 575 4400	tom.tillman@us.tdk-lambda.com