

Power Supplies

Low audible noise 800W and 1000W medical and industrial power supplies provide power densities of up to 27.2W/cubic inch

Date: 23 April, 2024

Ref: LA196

TDK Corporation (TSE 6762) announces the introduction of the TDK-Lambda brand CUS800M and CUS1000M AC-DC power supply series in a 6.73 x 3.35 x 1.67" (171 x 85 x 42.5mm) case size. Rated at up to 800W and 1000W, these very compact products also feature a variable speed fan with typically 30 - 42dBA audible noise. The power supplies can be used in a wide range of applications, including medical, dental, test and measurement, broadcast and industrial equipment.

The series accepts an 85 to 265Vac input, delivering full power at 90Vac, and is available with 12V, 24V, 36V and 48V outputs. A 5V 2A standby voltage, remote on/off, remote sense and a power good signal are fitted as standard. With efficiencies of up to 95.5%, internal heating is reduced, allowing reliable operation in the compact package size. The off-load power consumption is typically <0.6W when the supply is put into standby mode. These CUS-M models can operate in -20°C to +70°C ambient temperatures, derating linearly from 40°C to 60% load at +70°C. Both models have a five-year warranty.

The CUS800M and CUS1000M have an input to output isolation of 4000Vac (2 x MoPP), an input to ground isolation of 2000Vac (1 x MoPP), and an output to ground isolation of 1500Vac (1 x MoPP) for B and BF rated medical equipment. The leakage current is <250µA and the maximum operating, transportation and storage altitude is 5000m.

Safety certifications include IEC/EN/ES 60601-1 and IEC/EN/UL 62368-1 with CE/UKCA marking for the Low Voltage, EMC and RoHS Directives. The units also comply with EN 55011-B and EN 55032-B conducted and radiated emissions, and meet the EN 61000-3-2 harmonics, IEC60601-1-2 Edition 4 and IEC 61000-4 immunity standards.

Further information on the products can be found at [CUS800M and CUS1000M Series Datasheet \(tdk.com\)](https://www.tdk.com/en/lambda/cus800m-cus1000m-series-datasheet)

Main applications

- Medical, dental, test and measurement, broadcast and industrial equipment

Main features and benefits

- Compact 6.73 x 3.35 x 1.67" (171 x 85 x 42.5mm) size
- Acoustic noise is typically 30dBA at 20% load, 42dBA at full load
- <0.250mA leakage current
- Medical and industrial safety certifications
- Class B conducted and radiated EMI

Key data

Model		CUS800M	CUS1000M
Input voltage range	Vac	85 - 265	
Output voltage	Vdc	12, 24, 36 and 48	
Maximum output power	W	801.6	1003.2
Efficiency	%	Up to 95.5	
Safety certifications	-	IEC/EN/ES 60601-1 and IEC/EN/UL 62368-1	
Size (LxWxH)	mm	171 x 85 x 42.5	
Other features	-	5V 2A standby voltage, remote on/off and a power good signal	
Warranty	-	Five years	

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 2023, TDK posted total sales of USD 16.1 billion and employed about 103,000 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 +1 619-575-4400	tom.tillman@tdk.com
EMEA	Hannah Owen	TDK-Lambda UK +44 (0)1271 856667	tlu.powersolutions@tdk.com
	Danielle Burness	Publitek +44 (0)7581 024101	danielle.burness@publitek.com
Other Asia	BK Neo	TDK-Lambda Singapore Pte Ltd. +65 6251 7211	tls.marketing@tdk.com
Greater China	Helen Van	TDK-Lambda (China) Electronics Co., Ltd. +86 21 64850777 *209	helen.van@tdk.com



Japan	Mr. Daiki Ito	TDK Corporation	+813 6778-1055	TDK.PR@tdk.com
--------------	---------------	-----------------	----------------	----------------