

Power Supplies

Class I and Class II 70W and 160W external AC-DC power supplies suit medical and industrial applications

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TDK Corporation (TSE 6762) announces the expansion of the TDK-Lambda DTM series of medical and industrial AC-DC external power supplies to include 70W and 160W models. Both power levels are offered with a choice of a Class I IEC320/C14 inlet (with an earth ground connection) or a Class II IEC320/C8 inlet (double insulated, no ground). The Class I models are suitable for medical, industrial, test and measurement and in addition, the Class II (C8 suffix) for medical home healthcare, hospital, clinical and dental applications.

The DTM70 and DTM160 series accepts an 80 to 264Vac input, has a no-load power consumption of less than 150mW and efficiencies of up to 93%. This allows the external power supplies to conform to the DoE Level VI Efficiency and the EU Regulation 2019/1782 Eco-design requirements for energy savings.

The DTM70 is available with 12V, 15V, 18V, 24V, 36V and 48V output voltages and the DTM160 with 12V, 24V, 36V and 48V. A standard locking DIN output connector prevents accidental disconnection of the output voltage from the host equipment. Other connector versions and cable assemblies are available on request.

The adapters are housed in a robust plastic case with dimensions of only 120 x 52 x 31mm (L x W x H) for the DTM70, and 150 x 70 x 38mm for the DTM160. The Ingress Protection rating is IP21.

Both models have an input to output isolation of 4,400Vac (2 x MoPP), and the Class II models a minimum input to ground and output to ground isolation of 1,700Vac (1 x MoPP). The Class I leakage current is <300µA. The maximum operating, transportation and storage altitude is 5,000m.

Safety certifications include IEC/EN 60601-1, ANSI/AAMI ES 60601-1, IEC 60601-1-11 (Class II models) and complies with IEC/EN/UL 62368-1 for CE and 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 meets the EN 61000-3-2 harmonics, IEC 60601-1-2 Edition 4 and IEC 61000-4 immunity standards

More information on the DTM70 and DTM160 series, including distributor inventory, can be obtained from the TDK-Lambda Americas website at <https://www.us.lambda.tdk.com>.

Main applications

- Medical, clinical, healthcare, industrial, test and measurement.

Main features and benefits

- 70W and 150-160W Ratings
- Conforms to DoE Level VI Efficiency and EU Regulation 2019/1782 Eco-design requirements
- High Efficiency - Up to 93%

- IP21 (Ingress Protection rating)
- Certified to the IEC 60601-1 safety standards

Key data

Model		DTM70CNxxx	DTM160CNxxx
Input voltage range	Vac	80 - 264	
Output voltages	Vdc	12, 15, 18, 24, 36 and 48	12, 24, 36, 48
Maximum output power	W	70	150 (12V) to 160 (24, 36, 48V)
Efficiency	%	Up to 91	Up to 93
Safety Certifications	-	IEC/EN 60601-1, ANSI/AAMI ES 60601-1, IEC/UL/CSA/EN 62368-1	
Size (L x W x H)	mm	120 x 52 x 31	150 x 70 x 38
IP Rating	-	IP21	

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

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