

Power Supply Product

550 to 650W Modular Power Supplies Have Full MoPPs Isolation, Low Acoustic Noise and up to 10 Outputs

June 2019

TDK Corporation (TSE 6762) announces the introduction of the TDK-Lambda brand QM4 modular power supplies rated at 550 to 650W. This further extends the QM series which can provide up to 1500W output power. The QM4 models are available with up to 10 outputs, have full MoPPs (Means of Patient Protection) isolation and low acoustic noise. With medical and industrial safety certifications, the power supplies are suitable for use in medical, test and measurement, communications and broadcast equipment.

Accepting a wide range 90 to 264Vac, 47-63Hz input (440Hz with reduced PFC), the QM4 can deliver 550W at low line and 650W with a high line 180-264Vac input. With its modular construction, the series can be configured using a simple on-line configurator to provide 1 to 10 independently regulated outputs and include individual output good signal and remote on/off functions. The QM series module output voltages range from 2.8V to 105.6V and have output power levels from 300W to 1200W. A further subset of option modules provides an AC Fail signal, standby voltages (up to 12V, up to 2A), global remote on/off and PMBus™ communications. Overall case dimensions for the QM4 are 108 x 63.3 x 270mm (W x H x D).

The QM4 will operate in ambient temperatures of -20 to +70°C (-40°C start-up), with output power and output current linearly derating above 50°C to 50% at 70°C. With efficiencies of up to 91%, less internal heat is generated allowing the use of a low speed cooling fan to reduce audible noise. A lower airflow speed also significantly reduces the ingress of dirt and other contaminants, improving product reliability. All models in the QM series have a seven-year warranty as standard.

The power supply has 4,000Vac (2 x MoPPs) input to output, 1,500Vac (1 x MoPP) input to ground and 1,500Vac (1 x MoPP) output to ground isolation. All models are certified to the IEC/EN/UL/CSA 60601-1, ANSI/AAMI ES 60601-1 and IEC/EN/UL/CSA 60950-1 safety standards. The QM series is also designed to meet IEC/EN61010-1 with CE marking for the Low Voltage, EMC and RoHS Directives. Earth leakage current is less than 300µA, and complies with the EN61000-6-3:2007 and EN60601-1-2:2015 (curve B conducted and radiated) emission standards. The units also meet the EN60601-1-2 and EN61000-6-2 immunity standards and are designed and manufactured under the control of ISO9001 and ISO13485 (including risk management).

More information can be obtained at the following TDK-Lambda Americas website, <http://www.us.tdk-lambda.com/lp/products/qm-series.htm>, or by calling 800-LAMBDA-4. Products can be configured using the "Product Quick Finder" at <http://www.us.tdk-lambda.com/lp/>.

Major applications

Medical, including BF rated equipment, test and measurement, industrial and communications

Main features and benefits

- Full medical isolation (MoPP), suitable for B and BF-rated equipment
- Low Speed, low audible noise fans
- Up to 10 outputs
- 7 year warranty

Major specifications

Model		QM4
Input voltage range	Vac	90 – 264Vac
Output voltages	Vdc	2.8 – 105.6Vdc
Maximum output power	W	650W
Efficiency	%	Up to 91%
Safety Certifications	-	IEC/EN/UL/CSA 60601-1, ANSI/AAMI ES 60601-1, IEC/EN/UL/CSA 60950-1. Designed to meet IEC/EN61010-1
Size (W x H x L)	mm	108 x 63.3 x 270mm
Warranty	-	Seven years

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 2019, TDK posted total sales of USD 12.5 billion and employed about 105,000 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 <https://www.tdk-lambda.com/>

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