

COSEL launches new compact 2"x3" power supply series for demanding medical applications

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- Medical isolation grade 2MOPP Input / Output 4kVAC Isolation
- Low leakage current suitable for medical Body Floating (BF) applications
- Complies with EN 60335 safety standard
- Low power consumption at no load
- Universal input range 85 to 264VAC
- Industry standard 2"x3" footprint
- 5 year warranty

COSEL Co, Ltd (6905: Tokyo) today announced the expansion of its medical power offering with the addition of the new UMA series, the first two models being the 30W UMA30F and the 60W UMA60F. Both models feature a universal input range of 85 to 264VAC and comply with international safety standards. Designed for demanding medical applications, the UMA series is suitable for Body Floating (BF) applications and complies with 2MOPP (IN/OUT) and 1MOPP (OUT/FG) safety requirement. Based on a robust platform, the units' design has been optimized to offer a very good price/performance ratio for medical applications requiring a high quality power solution. The UMA series is available in up to five output voltages of 5, 12, 15, 24, and 48VDC.

Medical applications are requiring robust and highly reliable power supplies that are able to operate around the world and comply with safety regulations. Based on many years of expertise, COSEL power designers developed an optimized flyback topology platform to offer an excellent price/performance ratio without compromising on quality and reliability. The UMA series can be operated within a universal Input range of 85 to 264VAC, and has a typical efficiency up to 91% at high line.

Currently four single output voltages are available as standard for the UMA30F: 5V/3A, 12V/2.5A, 24V/1.3A and 48V/0.65A, and five for the UMA60F: 5V/6A, 12V/4.5A, 15V/3.5A, 24V/2.5A and 48V/1.25A. Output is factory adjusted to a fixed value, but in applications where output voltage adjustment is required an option 'Y' with potentiometer is available.

The UMA series includes inrush current limiting circuitry, overcurrent, and overvoltage protection. Exhibiting versatility and robustness, the power



supplies can be operated in an environmental temperature range of -20 to +70 degrees centigrade. Depending on the final equipment assembly style and cooling conditions, a derating may apply.

With its medical focus, the UMA series' input to output isolation complies with 2MOPP, its input to Frame Ground (FG) complies with 1MOPP, and output to FG with 1MOPP. The units are approved in accordance with ANSI/AAMI ES60601-1 and EN60601-1 3rd Edition. In the case of Body Floating applications where patient leakage current must be less than 100 μ A, with its 75 μ A figure the UMA series is well below that limit and so eminently suitable for such applications.

The UMA series meets the following agency approvals: ANSI/AAMI ES60601-1, EN60601-1 3rd, C-UL (equivalent to CAN/CSA-C22.2 No.60601-1), UL62368-1, EN62368-1, C-UL (equivalent to CAN/CSA-C22.2 No.62368-1) and complies with EN60335-1.

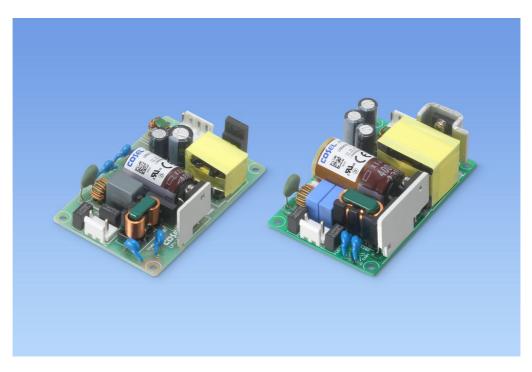
To accommodate application specific requirements, three options are available including adjustable output voltage (Y), terminal block (T), and for applications requiring additional safety the UMA30F and UMA60F are available with reinforced isolation in conformance with the IEC class II (E).

The UMA30F measures $50.8 \times 21.7 \times 76.2 \text{mm} [2.0 \times 0.85 \times 3.0 \text{ inches}]$ (W x H x D) and weighs 80g max. The UMA60F is just 2.5mm taller (24.2mm) and weighs 120g max.

The UMA series has an excellent five-year warranty and conforms to the European RoHS and Low Voltage Directives.

The combination of small size, excellent cost/performance ratio, and high quality makes the UMA series an ideal power solution for demanding applications not only in the medical market but also for test and measurement, and industrial applications including household and similar electrical appliances.





Designed for demanding medical applications, the UMA series is suitable for Body Floating (BF) applications and complies with 2MOPP (IN/OUT).

Related link: https://www.coseleurope.eu/Products/AC-DC/UMA



About COSEL:

Established in Japan 1969, COSEL is one of the world's leading designers and manufacturers of high performance AC-DC Power Supplies, DC-DC Converters and EMI Filters. With quality, reliability & flexibility as our main focus, we pride ourselves on developing some of the highest quality and most reliable products seen anywhere in the world today. The Cosel Group is a \$210 million global company employing some 690 staff with sales offices throughout Japan, Asia, Europe and North America. Our product range is aimed mostly at demanding applications within the Industrial, Factory Automation, Medical, Telecoms, Lighting, Audio/Broadcast & Renewable Energy sectors. A flexible approach with full in-house design means we deliver products using the very latest technology meeting the growing demands of our customers.

Note to the Editors:

The Cosel Group includes the European power specialist Powerbox International AB, which has been acquired June 25, 2018 by COSEL.

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Reference :

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