



## **COSEL announces launch of wide range of low profile, high efficiency power supplies for medical applications**

**Press Release**

**2024-01-09**

- Highly reliable design
- Certified for medical 2MOPP
- Industrial OVC III
- 4kV isolation
- Low-profile – 30 mm
- Economical design
- Complies with SEMI F47

**COSEL Co, Ltd (6905: Tokyo) today announced the launch of a wide range of low profile power supplies for medical applications. The WMA series includes two families, the WMA-F and the WMA-H. The WMA-F has a universal input range of 85 to 264VAC and is available in three power levels, 35, 75 and 100W. Designed for medical systems integration the WMA-H is available in two power levels, 150 and 350W, and in two ranges of input voltage that is switch selectable. The overall WMA series complies with international safety standards for demanding medical applications and features an isolation grade of 2MOPP (IN/OUT) and 1MOPP (IN/FG). Based on a robust platform using the latest power switching technologies, the units' design is optimized to offer an excellent price/performance ratio for medical applications requiring a high quality power solution. The WMA series is also suitable for demanding industrial fix applications requiring high isolation such as specified in Over Voltage Category III. The WMA-35-75-100F and WMA-150H are design optimized for convection cooling whilst the WMA-350H includes a fan for additional cooling and performance in demanding applications.**

Medical applications are requiring robust and highly reliable power supplies that are able to operate around the world and comply with many different safety regulations. Also, new equipments require power supplies to have a height measurement less than 1U (44.45mm - 1.75 inches). In order to accommodate this slim profile adopted by the medical industry manufacturers, the WMA series has a height of just 30mm. Based on many years of expertise, COSEL's power designers have developed an optimized platform offering an excellent price/performance ratio without compromising on quality and reliability. Combining a standardized platform and best practices in power and thermal management, the WMA series achieves a high efficiency level of up to 91% at high line, and utilizing a limited number of components that contribute to higher reliability and reduced cost. The WMA series has also been designed for



industrial applications such as semiconductors manufacturing equipment, complying with Semiconductor Processing Equipment Voltage Sag Immunity SEMI F47 and fix applications required to meet Over Voltage Category III.

The WMA series comprises five models: WMA35F, WMA75F, WMA100F, WMA150H and the WMA350H covering a power range from 35W to 350W. The WMA35F is available in four, single output voltages: 5V, 12V, 24V and 48V. The WMA75F, WMA100F and WMA150H are available in three single output voltages, 12V, 24V and 48V. The WMA350H is available in four single output voltages, 12V, 24V, 36V and 48V. With all models the output voltage can be trimmed using the built-in potentiometer.

The WMA-F series can be operated within a universal Input range of 85 to 264VAC, and designed for systems integration, the WMA-H can be operated in the range of 85 to 132VAC and 170 to 264VAC, switch selectable.

The WMA series includes inrush current limiting circuitry, and 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 and industrial focus, the WMA series' input to output isolation complies with 2MOPP, and its input to Frame Ground (FG) complies with 1MOPP. The units are approved in accordance with UL62368-1, C-UL (equivalent to CAN/CSA-C22.2 No.62368-1), EN62368-1, ANSI/AAMI ES60601-1, C-UL (equivalent to CAN/CSA-C22.2 No.60601-1), EN60601-1 3rd, EN61558-2-16 (OVC III), and comply with IEC60601-1-2 4th Ed.

The WMA35-75-100F has no built-in active PFC though it complies fully with the IEC61000-3-2 (Class A). Designed for systems with integrated frontend PFC, depending on the final application the WMA150-350H may require external power factor correction circuitry.

The result of careful design, the WMA series' EMI emissions comply with CISPR11-B, CISPR32-B, EN55011-B, EN55032-B, FCC Part 15-B, FCC Part 18-B and in EMC immunity with EN61000-4-2, 3, 4, 5, 6, 8, 11.

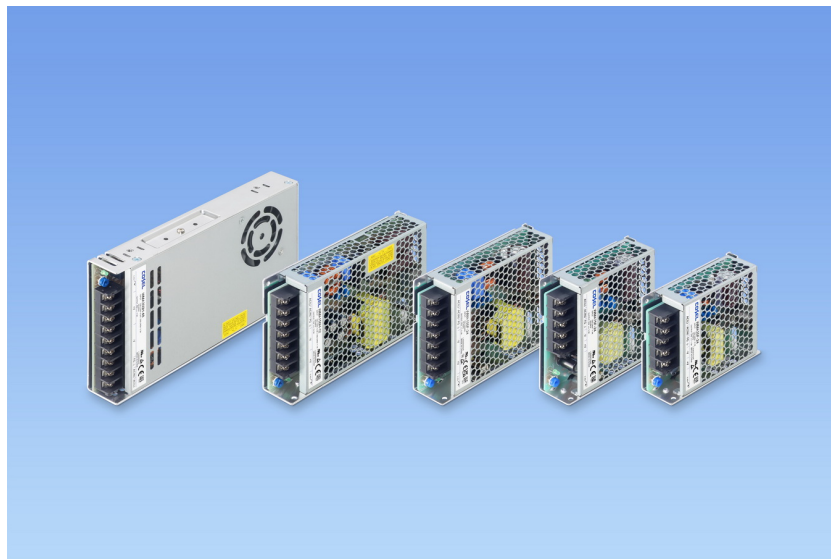
For strength and longevity, the WMA series is built on an aluminum chassis and enclosed in a hot-dip galvanized steel board (SGCC) case. The WMA35F measures 30 x 82 x 99mm [1.18 x 3.23 x 3.90 inches] (W x H x D), and has a weight of 200g max. The WMA75F measures 30 x 97 x 99mm [1.18 x 3.82 x 3.90 inches] (W x H x D), and has a weight of 250g max. The WMA100F measures 30 x 97 x 129mm [1.18 x 3.82 x 5.08 inches] (W x H x D), and has a weight of 300g max. The WMA150H measures 30 x 97 x 159mm [1.18 x 3.82 x 6.26 inches] (W x H x D), and has a weight of 500g max. The



WMA350H measures 115 x 30 x 215mm [4.53 x 1.18 x 8.46 inches] (W x H x D), and has a weight of 800g max.

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

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



COSEL's WMA series delivers efficient and reliable power to demanding medical and industrial applications

**Related links:**

WMA35F : <https://www.prbx.com/product/wma35f/>

WMA75F: <https://www.prbx.com/product/wma75f/>

WMA100F: <https://www.prbx.com/product/wma100f/>

**Link to Cosel Europe product page:**

WMA : <https://www.coseleurope.eu/Products/AC-DC/WMA>



**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 \$255 million global company employing some 710 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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