



Process Control | Imaging | Dental | Medical | Laboratory | Factory Automation

COST-EFFECTIVE DIGITALLY-CONTROLLED POWER SUPPLIES

Artesyn LCM series AC-DC power supplies have built a reputation for outstanding quality and high efficiency at a competitive cost, with safety approvals for industrial and medical equipment.

The quality and reliability of the LCM series is assured through careful component selection, automated production processes, sophisticated circuit design and a digital control loop. Digital control also enables the LCM family to be rapidly and cost-effectively modified to suit the exact needs of your application.

Detailed technical reference notes and outstanding technical support make it easy for you to integrate the LCM series into your design.

Artesyn has invested in the manufacturing of the LCM series to shorten lead times and lower the minimum order quantity for non-stock units.



Digital
Control

300 -
1500 W

High
Density

Single
Output

Medical
Approvals

High
Reliability

Market-Leading
Efficiency

LCM Series AC-DC Power Supplies

The LCM series AC-DC power supplies maintain Artesyn's high standards of quality and reliability, with robust screw terminals and long life components.

Many models in the LCM series do not require any derating at low line, unlike many other units on the market.

Variable-speed 'Smart Speed' fans draw on software controls developed by Artesyn to match fan speed to the power supply's cooling requirement and load current. Managing the fan in this way not only saves power but also reduces wear, thus extending its life. These innovative fan controls also enable you to keep the acoustic noise levels very low, while providing self-contained thermal management.

LCM series power supplies accept operating inputs between 90 Vac and 264 Vac (85-264 Vac for LCM600). Models are available in versions offering 12, 15, 24, 36, and 48 V outputs; the LCM1500 additionally offers a 28 V unit.

All output voltages can be trimmed to a percentage of their nominal value ($\pm 10\%$ or $\pm 20\%$ depending on the model), which means that almost any output voltage between 9.6 and 57.6 V can be provided by LCM series power supplies.

Current sharing capability allows multiple power supplies to be connected in parallel for higher power applications. Power factor correction is implemented internally, offering a typical power factor of 0.98 or 0.99. An ORing FET provides protection in the event that an input power source fails, while the units also feature overload protection (OCP), overvoltage protection (OVP) and overtemperature protection (OTP).

The LCM series medical safety approvals are compliant with the third edition of the ANSI/AAMI ES60601-1:2005 / IEC 60601-1 safety standard. Medical safety compliance extends to providing 2xMOPP (means of patient protection) and the complete risk management files required by the 3rd edition.

89% - 93% typical full-load efficiency

9.6 - 57.6 V output

Optional 5V @ 2A standby

2XMOPP

Optional conformal coat

Operating temperature -40 °C to +70 °C
(derating above 50 °C)

3 YEARS
manufacturer's
warranty

MTBF greater than
500,000
hours under normal
operating conditions



310 W Total Power

LCM300 Series

- 350 watts peak power for some models
- 7.1 watts per cubic inch
- 7 x 4 x 1.61 inches
- 177.8 x 101.6 x 41 mm



600 W Total Power

LCM600 Series

- 7.41 watts per cubic inch
- 7.5 x 4.5 x 2.4 inches
- 190.5 x 114.3 x 62 mm
- Optional constant current



1000 W Total Power

LCM1000 Series

- 7.7 watts per cubic inch
- 10 x 5.2 x 2.5 inches
- 273.2 x 132 x 61.7 mm
- Optional constant current



1500 W Total Power

LCM1500 Series

- 12 watts per cubic inch
- 10 x 5.2 x 2.5 inches
- 273.2 x 132 x 61.7 mm
- Optional constant current

Artesyn Embedded Technologies

Artesyn Embedded Technologies is a global leader in the design and manufacture of highly reliable power conversion solutions for a wide range of industries including communications, computing, consumer electronics, medical, aerospace and industrial automation.

Artesyn is one of the world's largest and most successful power supply companies, embracing the well-known Astec brand. The company's extensive standard AC-DC product portfolio covers a power range of 3 watts to 24 kilowatts and includes open-frame and enclosed models, highly configurable modular power supplies, rack-mounting bulk front end units, DIN rail power supplies, external power adapters and power supplies for LED lighting. Many of these products are available in medically approved versions and many of the higher power models feature extensive built-in intelligence.

As an industry leader in distributed power applications, Artesyn produces an exceptionally wide range of DC-DC power conversion products. These include isolated DC-DC converters, covering industry-standard sixteenth- to full-brick form factors with power ratings from 3 watts to 800 watts. Artesyn also offers three application-optimized families of non-isolated DC-DC converters, non-isolated memory power, and processor voltage regulator modules (VRMs).

As a pioneer in low power switch mode adapters, Artesyn has designed and manufactured solutions for almost every major mobile phone supplier. With well over one billion chargers shipped from its best-cost facilities, Artesyn has aligned itself to meet the demands for the next billion chargers through new platforms, automated manufacturing methodology and unsurpassed quality and reliability.

For more than 40 years, customers have trusted Artesyn to help them accelerate time-to-market and shift development efforts to the deployment of new, value-add features and services.

Headquartered in Tempe, Arizona, Artesyn has over 16,000 employees worldwide across ten engineering centers of excellence, four wholly-owned world-class manufacturing facilities, and global sales and support offices.

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