

## SERVER AND NETWORKING POWER SUPPLIES

### **DS Short Series AC-DC Distributed Power Front-Ends**

The latest Artesyn DS Short Series AC-DC power supplies in the short form factor are designed to provide a scalable input power conversion solution for computing, storage and networking equipment that uses distributed power architectures (DPA) and intermediate bus architectures (IBA).

This product family is housed in an industry-standard 1U high by 86 mm wide form factor with individual power ratings from 500 to 2,400 watts and a roadmap for higher power models. This provides the flexibility to select the model with appropriate power rating for today's requirements, and adjust for lower or higher power needs in the future. With a power density up to 50 W/in³ and efficiency ranging from 90 to 94% peak, you can be confident that you are getting a best-in-class power conversion solution regardless of which model you select.

Many of the models in this product family are available with various input and airflow direction options, enabling deployment in environments from enterprises to traditional data centers, -48 Vdc data centers, and telecom central offices. The DC input option can be used to power equipment from battery backup as well.

# SHORT SERIES

- Common Form Factor
- Digital Control (PMBus®)
- 500-2400 W
- High Density and Reliability
- Market-Leading Efficiency
- AC and DC Input Options

## **DS Short Series AC-DC Distributed Power Front-Ends**

Artesyn DS Short Series power supplies generate a main payload output of 12 Vdc for feeding downstream DC-DC converters in systems using distributed power architectures, together with a 12 Vdc standby output for power management circuitry.

Active current sharing helps maximize cost effectiveness by eliminating the need for additional components when paralleling multiple power supplies for very high current applications. These hot-pluggable power supplies support N+1 or N+N redundant architectures.

All AC-input models in the family are certified for 80 PLUS® Platinum level efficiency, peaking at 94%, and offer low total harmonic current distortion (EN61000-3-2).

Digital control using the PMBus® protocol and a built-in I<sup>2</sup>C serial interface facilitates remote set-up, monitoring and control using Artesyn Embedded Power's universal PMBus graphical user interface. This programming flexibility enables users to implement sophisticated power management schemes with minimal additional components.

All models offer overcurrent, overvoltage, undervoltage, overtemperature and fan fault protection. Most models include standard or reverse airflow options.



MTBF greater than 500,000 hours under normal operating conditions

#### **Target Applications**

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Server	Storage	Networking
High Performance (HPC)	Database	Spine Switch
Open Compute (OCP)	Cold Storage	Top-of-Rack (ToR) Switch
Cloud & Hyperscale	Hadoop	SDN Switch
Rackmount Multi-purpose	JB0D	Storage Switch
Supercomputer	JB0F	Data Center Switch
Multi-node	OCP Open Storage	Campus Network Switch
Blade Server	Cloud Hosting	Carrier Ethernet Switch
Appliance	SAN	Multiplexer
Application Server	Archiving	Security Appliance



- 90% 94% typical peak efficiency
- 11.4 12.6 V output
- 12 V standby
- 90 to 264 Vac input voltage
- -36 to -72 Vdc input voltage models
- Operating temperature 0 °C to +50 °C (derating above 50 °C)

Artesyn DS Short Series AC-DC power supplies are all designed in the same standard short form factor to provide a scalable input power conversion solution.





#### **DS495SPE**

- 495 W output power
- 41.25 A max output current
- 3 A max standby output current
- High power factor



#### DS500SDC

- 500 W output power (-48 V DC input)
- 41.76 A max output current
- 3 A max standby output current





#### **DS750PED-3**

- 750 W output power
- 62.5 A max output current
- 3 A max standby output current



#### **DS1100SDC**

- 1100 W output power (-48 V DC input)
- 91.76 A max output current
- 3 A max standby output current



#### **DS1100PED-3**

- 1100 W output power
- 91.76 A max output current
- 3 A max standby output current



#### **DS1600SPE**

- 1600 W output power
- 133.33 A max output current
- 3.5 A max standby output current





#### **DS2000SPE**

- 2000 W output power
- 163.9 A max (high line) or 82 A max (low line) main output current
- 3.5 A max standby output current



#### **DS2400SPE**

- 2400 W output power
- 196.7 A max (high line) or 114.75 A max (low line) main output current
- 3.5 A max standby output current

Our programming flexibility enables users to implement sophisticated power management schemes with minimal additional components.

#### **About Artesyn Embedded Power**

Artesyn Embedded Power, an Advanced Energy company, is a global leader in the design and manufacture of highly reliable power conversion solutions for a wide range of industries including communications, computing, server storage, healthcare and industrial. For more than 40 years, customers have trusted Artesyn to help them accelerate time-to-market and reduce risk with cost-effective power conversion solutions. Artesyn has over 8,000 employees worldwide across multiple engineering centers of excellence, wholly-owned world-class manufacturing facilities, and global sales and support offices. Artesyn Embedded Power is a registered, assumed name of Artesyn Embedded Technologies, Inc., an Advanced Energy company.

#### **About Advanced Energy**

Advanced Energy (Nasdaq: AEIS) is a global leader in the design and manufacturing of highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes. AE's power solutions enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial manufacturing, telecommunications, data center computing server storage and healthcare. With engineering know-how and responsive service and support around the globe, the company builds collaborative partnerships to meet technology advances, propel growth for its customers and innovate the future of power. Advanced Energy has devoted more than three decades to perfecting power for its global customers and is headquartered in Fort Collins, Colorado, USA. For more information, visit www.advancedenergy.com.

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