



# 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 2,000 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/in<sup>3</sup> 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.

## DS SHORT SERIES

- Common Form Factor
- Digital Control (PMBus<sup>®</sup>)
- 500-2000 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 Technologies' 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.

**2 YEARS**  
manufacturer's  
warranty

MTBF greater than  
**500,000**  
hours under normal  
operating conditions

## Target Applications

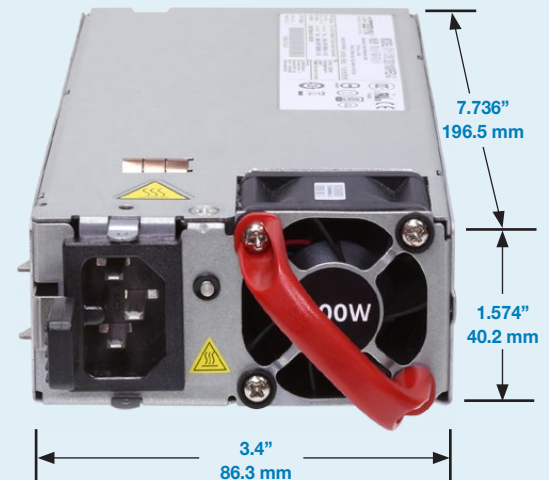
Server	Storage	Networking
High Performance (HPC)	Database	Spine Switch
Open Compute (OCP)	Cold Storage	Top-of-Rack (ToR) Switch
Cloud & Hyperscale	Hadoop	SDN Switch
Rackmount Multi-purpose	JBOD	Storage Switch
Supercomputer	JBOF	Data Center Switch
Multi-node	OCP Open Storage	Campus Network Switch
Blade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



# DS SHORT SERIES

- 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.





## 495 W



### DS495SPE

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

## 500 W



### DS500SDC

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



Power Management.  
Defined.

## 750 W



### DS750PED-3

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

## 1100 W



### DS1100SDC

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

## 1100 W



### DS1100PED-3

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

## 1600 W



### DS1600SPE

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

## 2000 W



### 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

*Our programming*

*flexibility enables*

*users to implement*

*sophisticated*

*power management*

*schemes with*

*minimal additional*

*components.*

**Artesyn produces an exceptionally broad range of products spanning every aspect of the computing, storage and networking market sector. These include front-end AC-DC and DC-DC power supplies, isolated brick-type DC-DC converters, and non-isolated point-of-load (POL) DC-DC converters.**

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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