Advanced Energy

CRPS POWER SOLUTIONS

SERVERS | STORAGE | NETWORKING

PRECISION | POWER | PERFORMANCE

Server and Networking Power Solutions

CSU Series CRPS AC-DC Distributed Power Front Ends

Server and Networking Power Supplies

Advanced Energy's Artesyn CSU front end series is a flexible power conversion solution for computing, storage, and networking equipment in the common redundant power supply (CRPS) form factor.

These series of AC-DC products are housed in the industry standard 1U x 73.5 mm x 185 mm CRPS form factor. Featuring individual power ratings from 550 W up to 2400 W, the choice for power supplies can cover cost-sensitive entry level systems, or power hungry applications with space constraints. Designed to provide the highest power in the smallest form factor, the series offers best-in-class power density of 75 W/in^3 and a common form, fit, and function for power capacity flexibility of your system designs.

Benefits

- Industry standard CRPS form factor
- Market leading power density
- 550 - 2400 W
- Full digital control
- Multiple input options
- Platinum efficiency certified
- 12.2 V main output
- 12.0 V 42 W standby output
- Up to 1400 W at low line input
- Best iTHD performance
- Up to 55 °C operating temperature

CSU Series CRPS AC-DC Distributed Power Front Ends

Advanced Energy's Artesyn CSU series includes options for using an IEC C13 or C19 AC power cord in the 2000 W range, with system designers free to choose the appropriate power capacity at 200 VAC. The CSU2400AP operates with an IEC C19 AC power cord to draw the full 2400 W at 200 VAC.

The series also comes with a 48 VDC input version, available at 2 kW and 1.3 kW, for networking and telecommunications applications.

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, cold redundancy mode, and system power throttling.

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 I²C serial interface facilitates remote set-up, monitoring and control using AE's universal PMBus graphical user interface. This programming flexibility enables users to implement sophisticated power management schemes with minimal additional components.

All models offer over-current, over-voltage, under-voltage, over-temperature, and fan fault protection.

2 YEAR
manufacturer warranty

MTBF greater than
500,000
hours under normal operating conditions

Target Applications

Server

- High Performance (HPC)
- Open Compute (OCP)
- Cloud & Hyperscale
- Rackmount Multi-purpose
- Supercomputer
- Multi-node
- Blade Server
- Appliance
- Application Server

Storage

- Database
- Cold Storage
- Hadoop
- JBOD
- JBOF
- OCP Open Storage
- Cloud Hosting
- SAN
- Archiving

Networking

- Spine Switch
- Top-of-Rack (ToR) Switch
- SDN Switch
- Storage Switch
- Data Center Switch
- Campus Network Switch
- Carrier Ethernet Switch
- Multiplexer
- Security Appliance

Advanced Energy's Artesyn CSU series of CRPS AC-DC power supplies are designed in the same standard short form factor to provide a scalable input power conversion solution.

IEC C20 option

IEC C14 option

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

80 PLUS PLATINUM

PMBus® Power Management. Defined.

550 W

CSU550AP-3

- 550 W output power
- 45 A max output current
- 2.5 A max standby output current

800 W

CSU800AP-3

- 800 W output power
- 66.7 A max output current
- 2.5 A max standby output current

1300 W

CSU1300AP-3

- 1300 W output power
- 108.3 A max output current
- 3.5 A max standby output current

1300 W

CSU1300ADC-3

- 1300 W output power
- 108.3 A max output current
- 48 VDC input

1800 W

CSU1800AP-3

- 1800 W output power
- 147.5 A max output current
- 3.5 A max standby output current

2000 W

CSU2000AP-3

- 2000 W output power
- 163.9 A max output current
- 3.5 A max standby output current

2000 W

CSU2000ADC-3

- 2000 W output power
- 163.9 A max output current
- 48 VDC input

2400 W

CSU2400AP-3

- 2400 W output power
- 196.7 A max output current
- 3.5 A max standby output current

ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. We design and manufacture highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

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