

2400-W 80PLUS Titanium Power Supplies Offer CRPS Form Factor

[Advanced Energy Industries](#) expanded its family of ultra-high-density front-end power supplies with the addition of the Artesyn CSU2400AT 2400-W series, which combines the common redundant power supply (CRPS) form factor with an 80PLUS Titanium efficiency certification. Operating with efficiencies of up to 96%, the power supplies reduce energy consumption and improve space utilization in distributed power conversion systems for compute, storage and networking equipment.

In addition to meeting the demanding requirements of new installations, the standard CRPS 1U x 73.5-mm form factor allows these power supplies to be quickly and easily integrated into existing deployments (see the figure).

“80PLUS Titanium certification is an increasingly common requirement for energy-related products and will soon become mandatory in compliance with European Lot 9 legislation,” said Richard Caubang, Advanced Energy’s senior technical director for enterprise and network products. “The CSU2400AT series addresses these requirements while the CRPS form factor provides a simplified upgrade path to higher efficiency, more space-efficient solutions in existing installations.”

Accepting input voltages of 180 to 264 Vac and 180 to 336 Vdc, the CSU2400AT hot-pluggable power supplies feature active power factor correction (PFC) and very low total harmonic current distortion to comply with EN 61000-3-2 limits even at light loads. These supplies are also PMBus-compliant.

Each power supply delivers a nominal output voltage of 12.2 V while active current sharing facilitates the connection of multiple power supplies in parallel for applications requiring higher load current or redundancy. A cold-redundancy capability optimizes efficiency in cases where system loads do not require the full power of connected power supplies. Additional specifications are shown in the table.

The CSU2400AT series is compliant with EMI Class A, IEC 60950 and IEC/EN/UL 62368 standards as well as all relevant safety standards. For detailed product information and technical specifications, see the CSU2400AT Titanium Efficiency Series [page](#).



Figure. The Artesyn CSU2400AT 2400-W series CRPS form factor power supplies offer up to 96% efficiency and space utilization in new and existing compute, storage and networking applications.

Table. Key specifications for the Artesyn CSU2400AT 2400-W series power supplies.

Specifications		Models - Stock check
Total Max Power: 2,400 W	Output Voltage: 11.4 V to 12.8 V	Warranty: 2 years
Total Max Current: 196.7 A	Outputs: Dual	Operating Temperature: -5 to +50°C
Input Voltage: 180 V to 264 V	Size (L x W x H): 7.280" x 2.890" x 1.570"	

ELECTRICAL SPECIFICATIONS

Input	Output	Logic Control
Input Range: 180-264 VAC		
Input Frequency: 47 - 63 Hz		
Efficiency: Platinum level		
Hold-up Time: 11 ms		
Power Factor: >0.98 at 50% load		
Input Range: 165-320 VDC		