

For immediate release

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Ultra-Compact Bulk Front-End Power Supplies from Emerson Network Power Feature 80 Plus Platinum Standard Efficiency

Carlsbad, Calif. [4 April, 2013] — Emerson Network Power, a business of Emerson (NYSE:EMR) and a global leader in delivering scalable embedded computing technology and power supplies for original equipment manufacturers in a wide range of industries, today launched two ultra-compact ac-dc front-end power supplies that meet the 80 Plus Platinum standard for efficiency. Rated at 750 watts and 1100 watts continuous output, the power supplies share the same form factor, providing the scalability that system designers need for long life cycle applications where power requirements may change in the future.

Designed primarily for space-constrained, high availability applications such as ‘always on’ enterprise servers, Emerson’s new 750 watt [DS750PED](#) and 1100 watt [DS1100PED](#) power supplies are both housed in 1U high rack-mounting enclosures measuring just 3.4 x 7.7 inches (86.3 x 196.5 mm). This form factor is significantly shorter than that of similarly rated earlier-generation power supplies – freeing up valuable system space – and is achieved by use of the latest power switching technology and high density component packaging techniques. Both power supplies combine an exceptional conversion efficiency of 94 percent peak with a high power density; the DS750PED provides up to 16.4 W/in³ (1 W/cm³), while the DS1100PED can deliver 24 W/in³ (1.46 W/cm³).

Capable of operating from any input voltage in the range 90 to 264 Vac, the power supplies use active power factor correction to maximize efficiency and ensure compliance with the international EN 61000-3-2 standard for harmonic current emission. Unlike many power supplies on the market, which only have a power factor approaching

unity when under full load, the DS750PED and DS1100PED have a power factor of at least 0.9 for all load conditions from 20 percent to full output. This simplifies the design of power distribution systems that use current sharing to boost output or active redundancy to increase fault tolerance, by ensuring paralleled power supplies operate at peak efficiency even when only partially loaded.

DS750PED and DS1100PED power supplies are fully digital and compatible with Emerson's universal PMBus™ graphical user interface, allowing control via an integral I2C interface using the industry-standard PMBus communications protocol. Each power supply generates 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 rated at 3 A for power management circuitry. The main DC output of the DS750PED and DS1100PED can deliver up to 62.5 A and 91.6 A respectively, and stays within regulation down to zero load. Active current sharing helps maximize cost-effectiveness by eliminating the need for additional components when paralleling multiple power supplies for very high current applications.

Emerson DS750PED and DS1100PED power supplies feature built-in ORing. Inrush current is limited to 38 A on the DS750PED and 55 A on the DS1100PED. Extensive performance monitoring facilities enable system integrators to implement sophisticated power management schemes – in addition to input and output voltage and current, real and reactive input power and power supply temperature values can be retrieved via the I2C bus interface.

The power supplies are comprehensively protected against fault conditions, including undervoltage, overvoltage and overcurrent of the main and standby output, fan failure and overtemperature. The standby output auto-recovers from over-voltage and overcurrent conditions; the main output auto-recovers from minor short-duration current overloads, but will latch persistent overcurrent faults, as well as any overvoltage condition. In the event of a failure, the power supplies are quick and easy to exchange; a front panel bi-color LED highlights the faulty unit, while opposite-end ac input and dc output connectors and a single-lever tray lock mechanism facilitate removal and replacement.

DS750PED and DS1100PED power supplies have an ambient operating temperature range of 10 to 50 degrees Celsius and incorporate low-noise fan cooling; forward and reverse airflow versions are available to suit different rack cooling schemes. The power supplies meet the rigorous FCC Docket 20780 (Subpart 15 Class A) conducted emission standard and comply with the EN 61000-4-11 standard for EMC immunity. They also carry a wide set of safety approvals, including UL/cUL/EN 60950, CE Mark and China CCC.

Designed specifically for long term reliability in high availability applications, Emerson Network Power's DS750PED and DS1100PED power supplies have a calculated operating life of five years and mean time between failure (MTBF) of 200,000 hours (calculated in accordance with Bellcore TR-332), running at full load and 25 degrees Celsius ambient. The power supplies are backed by a comprehensive two-year warranty.

A combined [high resolution photo](#) or separate images of the [DS750PED](#) and [DS1100PED](#) are available.

About Emerson Network Power

Emerson Network Power is a business of Emerson (NYSE:EMR) and, through its Embedded Computing & Power business, is the trusted partner for scalable embedded computing technology and power supplies for the aerospace, defense, computing, healthcare, industrial and telecom markets. Emerson Network Power's embedded computing solutions, AC-DC and DC-DC power supplies and wide range of technical services minimize design time, provide scalable and cost-effective support for released products, and critical products during legacy years. Learn more about Emerson Network Power Embedded Computing & Power products and services at www.EmersonNetworkPower.com

About Emerson

Emerson (NYSE: EMR), based in St. Louis, Missouri (USA), is a global leader in bringing technology and engineering together to provide innovative solutions for customers in industrial, commercial, and consumer markets around the world. The company is comprised of five business segments: Process Management, Industrial Automation, Network Power, Climate Technologies, and Commercial & Residential Solutions. Sales in fiscal 2012 were \$24.4 billion. For more information, visit www.Emerson.com.

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