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High Cost-Performance, High Reliability, High-Density DIN Rail Power Supply — XDR-E Series

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In modern industrial automation and smart manufacturing, DIN rail power supplies serve as the essential “power core” within control cabinets, providing stable and reliable power to PLCs, sensors, actuators, and other critical equipment. As a global leader in standard power supplies, MEAN WELL is trusted by engineers and system integrators for its exceptional quality and comprehensive product lineup. Now, MEAN WELL introduces the new XDR-E series — an economic DIN rail power supply with **high cost-performance, high reliability, and high power density**. With a slimmer design, higher power density, and powerful parallel operation capability, the XDR-E series offers unprecedented flexibility and cost advantages for system integration, making it the ideal power solution for next-generation control systems.

Key Advantages of the XDR-E Series

- Ultra-Slim Design & High Power Density: The XDR-E series features an extremely slim width, reducing overall size by 23% to 45% depending on the model. This saves significant DIN rail space and allows more functional modules to be installed in limited cabinet space.
- Outstanding Efficiency : With efficiency up to 96%, power loss during conversion is greatly minimized. This not only saves electricity costs but also reduces heat generation within the power supply, lowering the overall cabinet temperature and enhancing system stability.
- Comprehensive International Certifications :Fully certified for global sales and suitable for diverse applications.

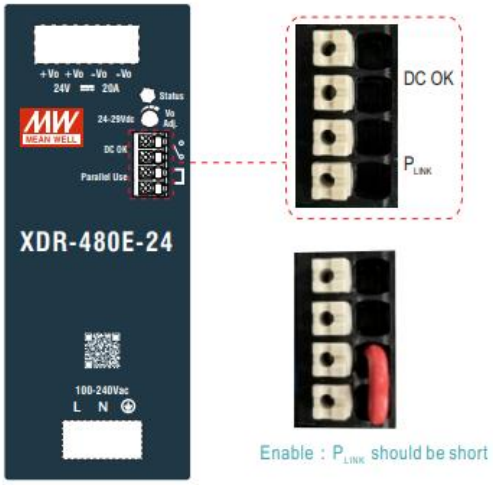
Innovative Parallel Operation — The Core Highlight of XDR-E

Many economic power supplies do not support parallel operation, requiring users to purchase higher-end models at a higher cost. However, the XDR-E series (480W and 960W models) includes a built-in droop current sharing circuit, making parallel use simple, safe, and efficient.

The XDR-E series supports up to 4 units in parallel, reaching a maximum power of 3840W (using XDR-960E). Compared with traditional wiring methods, the XDR-E greatly simplifies the process—parallel function is activated simply by shorting the *PLINK* terminals on the front panel.

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For more details, please refer to the XDR-E datasheet.



How the Droop Current Sharing Function Works

The built-in droop current sharing function (for 480W and above models) automatically adjusts output impedance so that each unit proportionally shares the load when operating in parallel.

The core principle is that the power supply slightly lowers its output voltage as output current increases. This allows the load to naturally balance among paralleled units. For example, with two XDR-E units in parallel: When unit A's output voltage drops due to increased current, unit B (with higher voltage) will take on more load.As unit B takes on more load, its droop characteristic also lowers its voltage, shifting some load back to A.

Through continuous dynamic adjustment, both units eventually share the current evenly. This droop-based architecture is simple, requires no additional parallel cables, lowers installation cost, and provides excellent expandability.

For related products or application needs, please contact MEAN WELL distributors or technical support. You are also welcome to follow updates on MEAN WELL's online exhibition hall for product information and solution courses.

