



XDR-E Series: 75W~960W 1Ø Input Ultra Slim & Cost-Effective DIN Rail Power Supply



INTRODUCTION

The MEAN WELL SDR/NDR/EDR series (75W~960W) has been on the market for over a decade, earning widespread recognition with cumulative sales reaching nearly 100 million units. These power supplies are widely used in industrial automation, power facilities, renewable energy equipment, network switches, and semiconductor processing equipment, among others. To offer an even greater value option, we are excited to introduce the all-new **XDR-E Series** (75W/120W/150W/240W/480W/960W).

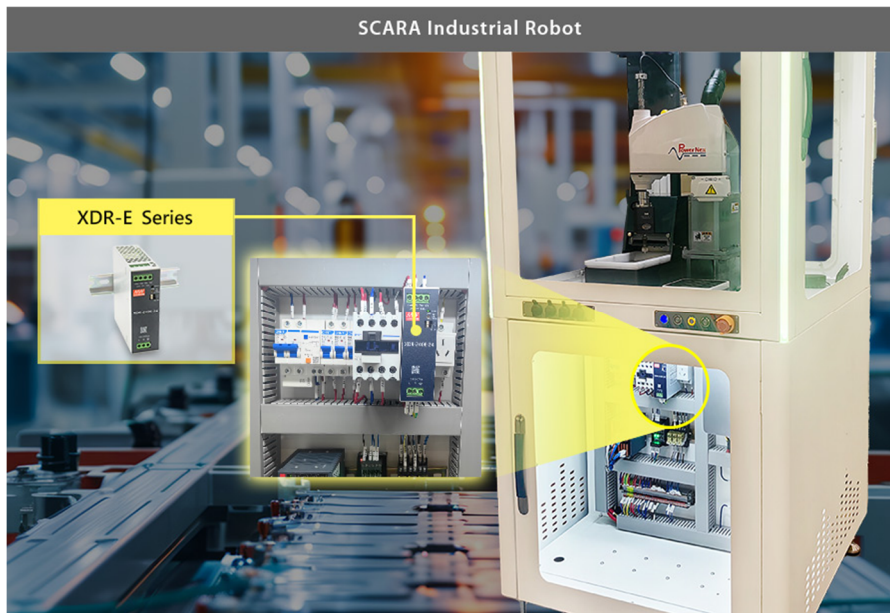
The XDR-E series stands out for its exceptional balance of performance and value! Compared to the previous SDR/NDR/EDR series, the XDR-E features a significantly reduced size—23% to 45% smaller (depending on the model). It also offers a more complete product lineup, addressing the market gap for 240W/480W 12V models while expanding the entire series to include 36V options. With improved efficiency of up to 96%, a wider operating temperature range of -40 to +70°C, and compliance with more international regulations across various industries, the XDR-E series delivers superior performance at a more competitive price - helping to reduce overall system costs.

Please refer to the table below at the end of the document for detailed specification between the new and old generations.

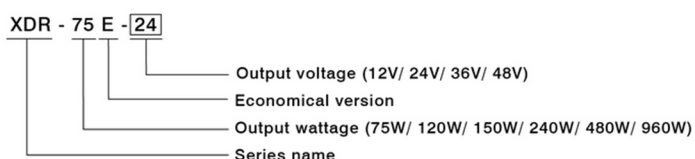
FEATURES

- 85~264 Vac input, suitable for global use
- Ultra slim design: width ranging from 30~96 mm (by model)
- 89~96% high efficiency and <1W~3.6W low power consumption (by model)
- Built-in parallel operation for flexible power expansion (XDR-480E/960E)
- Wide operating temperature range: -40°C to +70°C (derating >+50°C)
- Comprehensive protections: Short Circuit, Overload, Overvoltage, Overtemperature
- Compliant with OVC III standards
- Operable at high altitudes up to 5000m
- Comprehensive output voltage options: 12V (except 960W), 24V, 36V, 48V
- Adjustable output voltage: 12V: 12~15V, 24V: 24~29V, 36V: 36~42V, 48V: 48~55V
- Certified for multiple international standards (Note.)
- CB / TUV / UL / RCM / BSMI / CCC / BIS / EAC / CE / UKCA (62368-1 + 61010-1 + 61558-1)
- 3 years warranty

APPLICATION










ORDERING INFORMATION





OVERVIEW NEW AND OLD VERSION

Single Phase Input DIN Rail Power

		New Generation AC-DC 1Ø Input DIN Rail		Old Generation AC-DC 1Ø Input DIN Rail		
Model	 XDR High-End Flagship Ultra Slim & High Reliability DIN Rail	 XDR-E Cost-Effective Ultra Slim DIN Rail	SDR High Performance DIN Rail	NDR Mid-Grade DIN Rail	EDR Low-Grade DIN Rail	
Vin	85-305Vac	85-264Vac	88-264Vac	90-264Vac		
Inrush Current	<10A / 230Vac	< 30A-35A / 230Vac (by model)	<50A-80A / 230Vac (by model)	<40A / 230Vac		
Vout	12V, 24V, 36V, 48V (XDR-960 without 12V)	12V, 24V, 36V, 48V (XDR-960E without 12V)	12V, 24V, 48V (SDR-240-960 without 12V)	12V, 24V, 48V (NDR-240/480 without 12V)	12V, 24V, 48V (EDR-150 without 12V/48V)	
Output Wattage	75W / 120W / 240W / 480W / 960W 200% peak power 600% peak current	75W / 120W / 150W / 240W / 480W / 960W	75W / 120W / 240W / 480W / 960W 130% peak power	75W / 120W / 240W / 480W	75W / 120W / 150W	
Efficiency	89% ~ 96% (by model)		88.5% ~ 94% (by model)	85.5% ~ 92.5% (by model)	85% ~ 88.5% (by model)	
Parallel Function	3840W (3+1) (XDR-240-960)	3840W (3+1) (XDR-480E/960E)	3840W (3+1) (SDR-480/960)	N/A		
Communication	MODbus (XDR-240-960)	N/A	N/A	N/A		
DC OK Relay Contact	V		V	N/A		
Remote Control	V (XDR-240-960)	N/A	N/A	N/A		
ORing FET	V (XDR-120-960)	N/A	N/A	N/A		
Operating Temp.	-40~+85°C (>+60°C derating)	-40~+70°C (>+50°C derating)	-30~+70°C (>+50°C derating)	-20~+70°C (>+50°C derating)	-20~+60°C (>+50°C derating)	
OVC Level	OVC III		N/A			
PCB Conformal Coating	V	N/A	N/A			
Safety Certification	CB / TUV / UL / RCM / BSMI / CCC BIS / EAC / KC / CE / UKCA DNV / C102 / SEMI7 (BIS/KC certified, no stock by request)		CB / TUV / UL / RCM / EAC / CE / UKCA BSMI (SDR-120-960) KC (SDR-960)	CB / TUV / UL / RCM / EAC / CE / UKCA BSMI (NDR-480) BIS (NDR-240/480)	CB / TUV / UL / RCM / EAC / CE / UKCA BSMI (EDR-120/150) BIS (EDR-120)	
	62368-1 + 61010-1 + 61558-1		62368-1			
EMC	EMI	EN55032 Class B		EN55032 Class B		EN55032 Class A
	ESD	Contact ± 8KV Air ± 15KV	Contact ± 4KV Air ± 8KV	Contact ± 4KV Air ± 8KV		
Dimension (W x H x D)	75W	30 x 125.2 x 116 mm (-23%)		32 x 125.2 x 102 mm		
	120W	30 x 125.2 x 116 mm (-23%)		40 x 125.2 x 113.5 mm		
	150W	-	30 x 125.2 x 116 mm (-23%)	-		40 x 125.2 x 113.5 mm
	240W	40 x 125.2 x 116 mm (-35%)		63 x 125.2 x 113.5 mm		
	480W	48 x 125.2 x 125 mm (-45%)		85.5 x 125.2 x 128.5 mm		
	960W	96 x 125.2 x 132 mm (-23%)		110 x 125.2 x 150 mm		-
Terminal Block Type	Screw Terminal	Push In	Lever Actuated	Screw Terminal	Screw Terminal	
						
Warranty	5 Years		3 Years	3 Years	2 Years	

※ XDR is the flagship model, while XDR-E is the cost-effective model.

※ XDR-E can replace SDR / NDR / EDR. For higher specification requirements, advanced communication interfaces, marine/semi-conductor/explosion-proof safety certifications, alternative wiring methods, and a 5-year warranty, it is recommended to choose the flagship model -XDR.

※ Compared to SDR / NDR / EDR, XDR / XDR-E offers superior specifications, more comprehensive safety certifications, a more compact size, a wider selection of terminal blocks, and a longer warranty.

For new projects, please adopt the XDR / XDR-E series.

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