Meanwell single-phase input DIN rail power supplies compared

Model		New Generation AC-DC 1Φ Input DIN Rail		Old Generation AC-DC 1Φ Input DIN Rail		
		XDR NEW High-End Flagship Ultra Slim & High Reliability DIN Rail	**XDR-E** NEW 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 (>180Vac XDR-960E)	90~264Vac (>180Vac SDR-960)	90~264Vac	
Inrush Current		<10A / 230Vac	<30A~40A / 230Vac (by model)	<50A~80A / 230Vac (by model)	<40A / 230Vac	
Vout		12V, 24V, 36V, 48V (XDR-960 no 12V model)	12V, 24V, 36V, 48V (XDR-960E no 12V model)	12V, 24V, 48V (SDR-240~960 no 12V model)	12V, 24V, 48V (NDR-240/480 no 12V model)	12V, 24V, 48V (EDR-150 no 12V/48V models)
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% ~ 150% 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		up to 3840W (3+1) (XDR-240/480/960)	up to 3840W (3+1) (XDR-480E/960E)	up to 3840W (7+1/3+1) (SDR-480/960)	N/A	
Communication		MODbus (XDR-240/480/960)	N/A	N/A	N/A	
DC OK Relay Contact		√		√	N/A	
Remote Control		√	N/A	N/A	N/A	
ORing FET		√ (XDR-120/240/480/960)	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		√	N/A	N/A		
Safety Certification		CB / TUV / UL / RCM / BSMI / CCC BIS / EAC / KC / CE / UKCA DNV / SEMI47 / CID2 HazLoc (BIS/KC certified, by request)	CB / TUV / UL / RCM / BSMI / CCC BIS / EAC / KC / CE / UKCA (BIS/KC certified, 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 + 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 (+7% volume) (-7% width)		32 x 125.2 x 102 mm		
	120W	30 x 125.2 x 116 mm (-23%) (-25%)		40 x 125.2 x 113.5 mm		
	150W	-	30 x 125.2 x 116 mm (-23%) (-25%)	-		40 x 125.2 x 113.5 mm
	240W	40 x 125.2 x 116 mm (-35%) (-37%)		63 x 125.2 x 113.5 mm		-
	480W	48 x 125.2 x 125 mm (-45%) (-44%)		85.5 x 125.2 x 128.5 mm		-
	960W	96 x 125.2 x 132 mm (-23%) (-13%)		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.
※ The XDR or XDR-E can replace SDR / NDR / EDR. However for greater 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, the 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.