

240 Watts

- Ultra Slim Design - 45 mm
- 150% Peak Load for 3 seconds
- Ambient Operation from -25 °C to +70 °C
- Full Load at 60 °C
- High Efficiency - Up to 94%
- Volt-Free Contact for DC OK
- Selectable Parallel Operation
- 85 to 264 VAC Operation, 130 to 350VDC
- 3 Year Warranty



Dimensions:

DSR240:
1.77 x 4.88 x 4.69" (45.0 x 124.0 x 119.0 mm)

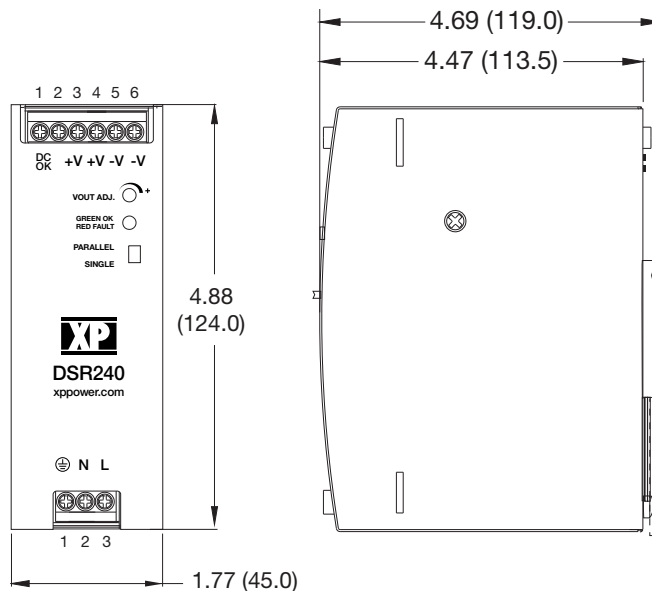
Models & Ratings

Output Voltage	Output Power	Output Voltage Trim ⁽³⁾	Output Current	Peak Current ⁽²⁾	Typical Efficiency ⁽¹⁾	Model Number
24 V	240 W	24.0-28.0 V	10.0 A	15.0 A	94%	DSR240PS24
48 V	240 W	48.0-56.0 V	5.0 A	7.5 A	93%	DSR240PS48

Notes

1. Typical efficiency at 230 VAC and full load.
2. Peak current is for a maximum of 3 s, see Application Notes. Average power is not to exceed nominal output power.
3. Output current should be limited so that nominal output power is not exceeded.

Mechanical Details



Pin Connector		
Conn	Pin	Designation
AC I/P	1	Ground
	2	N
	3	L
DC O/P	1	DC OK
	2	DC OK
	3	+Vout
	4	+Vout
	5	-Vout
	6	-Vout

Notes

1. All dimensions in inches (mm)
2. Weight: 1.68 lbs (760g)
3. Tolerance: ±0.02 in (±0.5 mm)

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage - Operating	85		264	VAC	Alternatively 130 to 350VDC ⁽¹⁾
Input Frequency	47	50/60	63	Hz	
Power Factor		0.95			At 230 VAC. Conforms to EN61000-3-2 Class A
Input Current - Full Load		2.3/1.13		A	115/230 VAC
Inrush Current			20/40	A	At 115/230 VAC. Cold start, 25 °C
Earth Leakage Current			1.0	mA	At 264 VAC, 60 Hz
Input Protection	T5.0 A / 250 V internal in-line fuse				

Note

1. DC input voltage was not assessed as part of the safety certification process.

Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage - V1	24		48	VDC	See Models and Ratings table
Initial Set Accuracy			±1	%	At 100% load
Output Voltage Adjustment				%	See Models and Ratings table
Minimum Load	0			A	No minimum load required
Start Up Delay			2	s	
Hold Up Time	20			ms	At full load
Line Regulation			±0.5	%	
Load Regulation			±1	%	
Transient Response - V1			5	%	Recovery within 1% in less than 200 µs for a 50% step load change at 0.2 A/µs
Ripple & Noise			240/480	mV pk-pk	24 V/48 V models. Measured at 20 MHz bandwidth 0-70°C
			480/480		24 V/48 V models. Measured at 20 MHz bandwidth -25-0°C
Overvoltage Protection	29		33	V	24 V model
	58		65	V	48 V model
Overload Protection	110		150	%	Trip & restart. See application note.
Short Circuit Protection					Trip & restart (hiccup mode), auto recovery
Thermal Protection		105 ±10		°C	Measured internally auto recovery
Temperature Coefficient			0.03	%/°C	

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		93		%	See Models & Ratings table
Isolation: Input to Output Input to Ground Output to Ground	3000			VAC	
	2500			VAC	
	500			VAC	
Switching Frequency		65		kHz	PFC, fixed
	60		300	kHz	Main converter, variable
DC OK Signal	Volt free contacts rated at 60 VDC/0.3 A, 30 VDC/1.0 A or 30 VAC/0.3 A (resistive load)				
Output LED	Green LED to indicate output on.				
Mean Time Between Failure	300			kHrs	MIL-HDBK-217F, +25 °C GB
Weight		1.68 (760)		lb (g)	