

HPS Series 240W Higher Performance AC-DC DIN Rail Power Supplies



Key Features

- 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



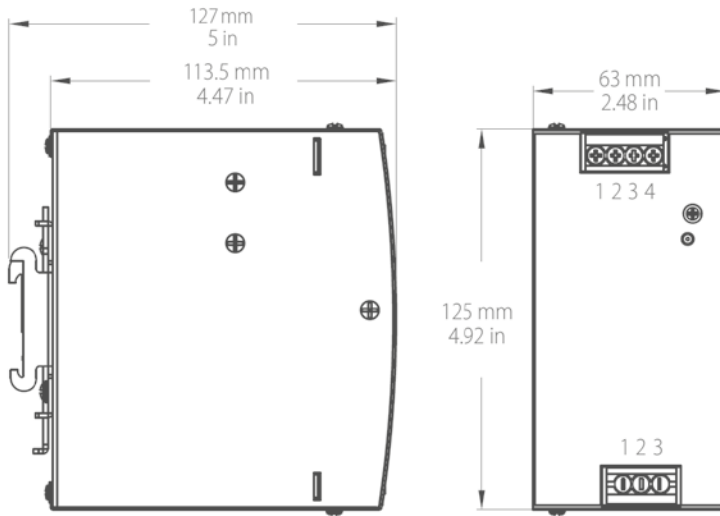
Technical Specification - 240W Output

Model	HPS-1-240-24DC	HPS-1-240-48DC
Input Voltage	90-264VAC / 120-375VDC	
Output Wattage	240W	240W
Peak Output Wattage	360W (for 3 secs)	360W (for 3 secs)
Output Voltage / Power Dissipation	24VDC / 240W	48VDC / 240W
Output Current	10A	5A
Efficiency	93%	93%
General Specification		
Approval	cURus	
Isolation Voltage	3000VAC/4242VDC	
Isolation Resistance	100MΩ @ 500VDC	
Ambient Temperature	-20 to +70°C	
Derating	(60 to 70°C) 2.5%/°C	
Storage Temperature	-40 to +85°C	
Relative Humidity	10 to 95% RH	
Cooling	Free air convection	
Dimensions	L125 x W63 x D113.5 (127 inc. DIN rail mount) mm	
Weight	1000g	
Case Material	Metal	
Input Specifications		
Rated Input Voltage	115-230VAC	
Input Voltage Range	90-264VAC, 127-375VDC	
Line Frequency	50/60Hz	
Power Factor @ 115VAC	0.99 Typical (0.61 Measured)	
Power Factor @ 230VAC	0.94 Typical (0.77 Measured)	
Inrush Current (115 / 230VAC)	35 / 55A	
Output Specifications		
Output Voltage Accuracy	±1%	
Minimum Load	0%	
Line Regulation	±0.5%	
Load Regulation	±1%	
Turn On Time	1000ms after AC applied to input at full resistive load	
Voltage Fall Time	150ms	
Voltage Rise Time	150ms	
Hold Up Time (115 / 230VAC)	10 / 16ms	
Temperature Coefficient	±0.03%/°C	
Ripple & Noise	150mVp-p	
Voltage Trim Range	22.5-28.5VDC	47-56VDC
Control & Protection		
Rated Overload Protection	110-150%	
Over Voltage Protection	29-33VDC	56-65VDC
Output Short Circuit	Shutdown Output Voltage with Auto Recovery	

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Dimensions (mm)



Pin Connections

Input		Output	
Pin No.	Description	Pin No.	Description
1	FG (⊕)	1, 2	Relay Contact
2	AC / N or DC-	3	DC OUTPUT V-
3	AC / L or DC+	4	DC OUTPUT V+

Installation

Ventilation / Cooling

Normal convection
All sides 25mm free space
For cooling recommended

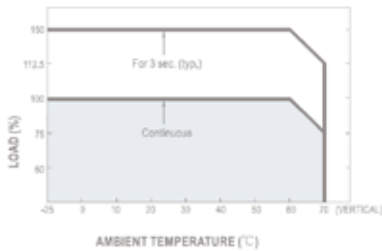
Connector Size Range

AWG24-10 (0.2 ~ 4mm²) flexible / solid cable,
- Input connector can withstand torque at maximum 9 pound-inches
- Output connector can withstand torque at maximum 5.5 pound-inches
8 m/m stripping cable end recommends
Use copper conductors only, 60 / 75°C

Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

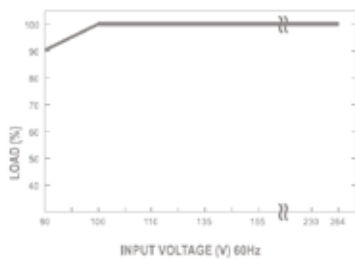
Derating Curve



DC OK Relay Contact

Contact Close	PSU turns on / DC OK
Contact Open	PSU turns off / DC Fail
Contact Ratings (max.)	30V / 1A resistive load

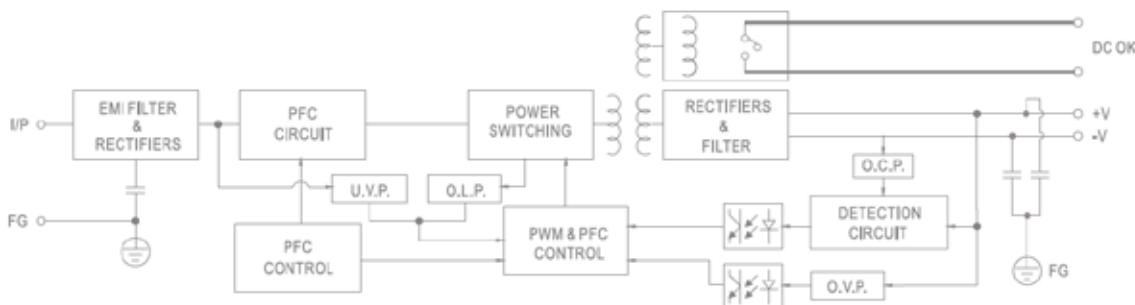
Minus Output & Input Voltage Curves



Peak Loading



Circuit Schematic



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Wire Gauge Template Selector

A Cross-Section of a Copper Conductor (Electric Wire)	Current-Carrying Capability	Voltage 230V	Rated Current	Current Limiting
1.5	19	4.1	10	16
2.5	27	5.9	16	25
4.0	38	8.9	25	32
6.0	46	10.1	32	40
10.0	70	15.4	50	63