

NPSM241 240W Ultra compact DIN Rail Power Supply



Main features

- High efficiency and extremely compact size
- Active PFC with low THD
- Overload 150%
- Efficiency up to 93.5%
- Up to 70°C operating temperature with no derating
- Constant Current or Hiccup mode limitation, user settable
- Wide range of output voltage
- Easy parallelable for power increase

TECHNICAL DATA

Model type	NPSM241-12 (P)	NPSM241-24 (P)	NPSM241-48 (P)	NPSM241-72 (P)
OUTPUT DATA				
Rated voltage	12Vdc	24Vdc	48Vdc	72Vdc
Adj. output voltage range	12...15Vdc	22...29Vdc	45...55Vdc	70...85Vdc
Continuous current	15A	10A	5A	3.3A
Overload limit	17.5A	15A	7.5A	5A
Short circuit peak current	20A	18A	8.5A	4A
Load regulation	<1%			
Ripple	< 160mVpp	< 260mVpp		< 380mVpp
Hold up time	> 25ms	> 20ms		> 15ms
Protections	<ul style="list-style-type: none"> ▪ Overload, short circuit, with constant current or hiccup mode (user settable) ▪ Thermal protection ▪ Input undervoltage lockout 			
Output overvoltage protection	> 18Vdc	> 33Vdc	> 68Vdc	> 100Vdc
Parallel connection	Up to 4 units for increased power			
Redundancy	(P) models include internal ORing Circuit			
User interface	<ul style="list-style-type: none"> ▪ DC OK green LED ▪ Overload red LED ▪ Current limitation mode jumper ▪ Dry contact (1A/30V) 			
INPUT DATA				
Input rated voltage / frequency	AC: 120...240Vac / 47...63Hz (range 85...264Vac) DC: 110...345Vdc			
Input rated current (I_{in} 120/230Vac)	2.4A 1.2A			
Inrush peak current	< 30A			
Power factor	> 0.95 @ full load			
Internal protection fuse	Fuse 6.3AT/250Vac (not user replaceable)			
External protection on AC line	MCB 10A C curve It is strongly recommended to provide external surge arresters (SPD) according to local regulations.			
GENERAL DATA				
Efficiency	> 90%	> 93%	> 93.5%	
Dissipated power	< 25W	< 19W	< 17W	
Operating temperature	- 40°C...+ 70°C / overtemperature protection (Start-up type tested: - 40°C)			
Temperature derating	No Derating			
Humidity	5...95% r.H. non condensing			
Life time expectation	221288h (25.2 years) at 25°C ambient full load			
Overvoltage category	II			
Pollution degree	2 (IEC 664-1)			
Input / output isolation	4.2 kVdc			
Input / ground isolation	2.2 kVdc			
Output / ground isolation	0.75 kVdc			
Standards & Approvals	UL508 (certified) - EN60950 (reference) - CE marking			
EMC Standards	EN61000-6-3, EN61000-6-2			
Protection degree	IP20 according to EN60529			
Connection terminals	2.5 mm ² , screw type pluggable (24...12 AWG)			
Case material	Aluminum			
Approx. weight	0.6 kg			
Size (W x H x D)	40.0 x 115.0 x 110.0mm			
Mounting Rail	IEC 60715/H15/TH35-7.5(-15)			

Notes:

- Technical parameters are typical, measured at 25°C and 230Vac.
- Power rating, losses, efficiency, ripple, thermal behaviour may change outside of the nominal rated input range. Contact factory for details.
- Data may change without prior notice in order to improve the product.

Dimensions

