

Main Features

- High efficiency and very compact size
- Active PFC for optimal efficiency with low THD
- High efficiency (>93% for >24V models)
- Overload 150%
- Up to 70°C operating temperature with no derating
- Constant Current or Hiccup mode limitation, user settable
- Wide range of output voltage (model dependent)
- Easy parallelable for power increase
- Includes models with internal ORing

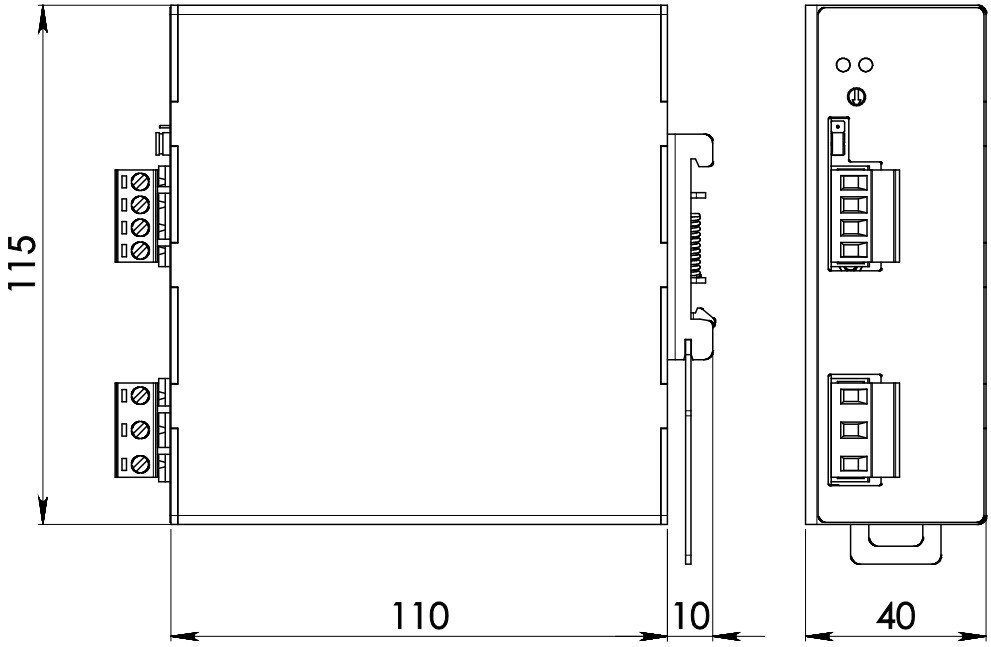
TECHNICAL DATA

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	11.5A	7.5A	5A
Short circuit peak current	20A	15A	8.5A	4A
Load regulation	≤ 2%	≤ 1%	≤ 1%	≤ 1%
Ripple & Noise	≤ 160mVpp	≤ 260mVpp	≤ 400mVpp	≤ 550mVpp
Hold up time	> 25ms	> 20ms		> 15ms
User interface	▪ DC OK green LED ▪ Overload red LED ▪ Current limitation mode jumper ▪ Dry contact (1A/30V)			
Output Protections	▪ 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			
INPUT DATA				
Input AC rated voltage Frequency	Nominal: 120…240Vac (UL certified) Range: 90…264Vac 47...63Hz			
Input DC rated voltage	110...345Vdc			
Input AC current Uin = 120Vac Uin = 240Vac	 2.4A 1.2A			
Input DC current Uin = 110Vdc Uin = 345Vdc	 2.5A 1.2A	 2.6A 0.9A		
Inrush peak current	< 45A			
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 UL certificated up to 70°C Start-up type tested: - 40°C[1]			
Temperature derating	No Derating			
Storage temperature	- 40°C...+ 80°C			
Humidity	5…95% r.H. non condensing			
Life time expectation	221288h (25.2 years) at 25°C ambient full load			
Overvoltage category Pollution degree	III 2 (IEC 664-1)			
Input / output isolation	4.2kVdc			
Input / ground isolation	2.2kVdc			
Output / ground isolation	0.75kVdc			
Safety Standards	▪ UL508 (certified) ▪ EN60950 (reference)			
EMC Emission	▪ EN55022:2010 (CISPR22) Class B ▪ EN55011:2009 /A1:2010 Class B ▪ EN61000-3-2:2014 Class A			
EMC Immunity	▪ EN61000-4-2:2008 Level 3 ▪ EN61000-4-3:2006 /A2:2010 Level 3 ▪ EN61000-4-4:2012 Level 3 ▪ EN61000-4-5:2014 Level 4 ▪ EN61000-4-11:2004 /A1:2010 Level 2			
Protection degree	▪ EN60529:1989 /A:2013 IP20			
Vibration sinuosoidal	▪ IEC 60068-2-6:2007 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2Hours / axis (X,Y,Z)			
Shock	▪ IEC 60068-2-27:2008 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total)			
Connection terminals	2.5mm², screw type pluggable (24...12AWG)			
Case material	Aluminum			
Approx. weight	0.600kg			
Size (W x H x D)	40.0 x 115.0 x 110.0mm			
Mounting Rail	IEC 60715/H15/TH35-7.5(-15)			

1) Possible at nominal voltage with load deration.

Notes:
- Technical parameters are typical, measured in laboratory environment at 25°C and 240Vac / 50Hz.
- Power rating, losses, efficiency, ripple, thermal behaviour and start-up 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





(model just for reference)

Input Connection:

Single phase:
- L = Line
- N = Neutral
- ⏚ = earth ground

DC:
- L = + Positive DC
- N = - Negative DC
- ⏚ = earth ground

Output Connection:

- + = Positive DC
- - = Negative DC
- Dry contact = NC