

- High efficiency and extremely compact size
- Only 56mm width aluminum enclosure
- Active PFC
- Overload 150%
- Constant current or hiccup mode limitation, user settable
- Up to 60°C operating temperature with no derating
- Wide range of output voltage
- Easy parallelable for power increase
- Codes ended with "H": include enhanced transient overvoltage protection (> 6kV)
- All models available as version "PH"



ULTRA
COMPACT

For reference only



TECHNICAL DATA

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NPSM481-24 (P, H)				
NPSM481-36 (P, H)				
NPSM481-48 (P, H)				
NPSM481-72 (P, H)				
OUTPUT DATA				
Rated voltage	24Vdc	36Vdc	48Vdc	72Vdc
Adj. output voltage range	22...29Vdc	32...40Vdc	45...55Vdc	70...85Vdc
Continuous current	20A	14A	10A	6.7A
Overload limit in constant current	21A	16A	12A	7A
Overload limit in hiccup (max. 5s)	30A	20A	17A	12A
Load regulation	≤ 1.5%	≤ 1%	≤ 0.5%	
Ripple and noise	≤ 150mVpp	≤ 200mVpp		≤ 350mVpp
Hold up time	≥ 25ms	≥ 20ms	≥ 25ms	
Protections	• Overload/short circuit: with constant current or hiccup mode (user settable) • Thermal protection • Input undervoltage lockout • Output overvoltage			
Status signals	• DC OK - green LED • OVERLOAD - red LED • DC OK - dry contact (NO, 24Vdc / 1A)			
Parallel connection	• Possible for power or redundancy (with external ORing module) • P (models) - include internal ORing circuit			
INPUT DATA				
Input AC rated voltage	Nominal: 120...240Vac (range 90...264Vac)			
Frequency	47...63Hz			
Input DC rated voltage	110...345Vdc			
Input AC rated current				
Vin = 120Vac	4.8A	5.5A	4.8A	
Vin = 240Vac	2.4A	2.8A	2.4A	
Input DC rated current				
Vin = 110Vdc	4.9A	5.3A	4.9A	
Vin = 345Vdc	1.7A	1.9A	1.7A	
Power factor correction	Active / > 0.9			
Inrush peak current / I²t	≤ 23A / 0.56A²s			
Touch (leakage) current	≤ 0.9mA			
Internal protection fuse	Fuse 8AT (not user replaceable)			
Recommended external protection	Fuse 10AT or MCB 10A C curve / SPD			
GENERAL DATA				
Efficiency	> 93%	> 94%		
Dissipated power	< 36.5W	< 32.5W	< 31W	
Operating temperature	- 40°C...+ 70°C (UL certified up to 50°C at 120Vac or up to 60°C at 240Vac)			
Derating	- 7.6W/°C over 50°C at 120Vac - 7.2W/°C over 60°C at 240Vac			
Lifetime expectancy / MTBF	167'953h (19.1 years) at 25°C ambient full load / (MIL-HDBK-217F) 600'000h at 25°C ambient full load			
Overvoltage category	III			
Pollution degree	2 (IEC60664-1)			
Input / output isolation	4.2kVdc			
Input / ground isolation	2.2kVdc			
Output / ground isolation	0.75kVdc			
Standards & Approvals	UL508 (certified, not applicable for "-36", "H" and "PH" models). EN60950 (reference). CE marking			