

- High efficiency and extremely compact size
- Only 40mm width aluminum enclosure
- Active PFC
- Overload 150%
- Constant current or hiccup mode limitation, user settable
- Up to 70°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"



For reference only



TECHNICAL DATA

| | NPSM241-12 (P, H) | NPSM241-24 (P, H) | NPSM241-36 (P, H) | NPSM241-48P (H) | NPSM241-72P (H) |
|--|--|-------------------|-------------------|-----------------|-----------------|
| OUTPUT DATA | | | | | |
| Rated voltage | 12Vdc | 24Vdc | 36Vdc | 48Vdc | 72Vdc |
| Adj. output voltage range | 12...15Vdc | 22...29Vdc | 32...40Vdc | 45...55Vdc | 70...85Vdc |
| Continuous current | 15A | 10A | 7A | 5A | 3.3A |
| Overload limit in constant current | 17A | 11A | 7.5A | 7A | 4A |
| Overload limit in hiccup (max. 5s) | 20A | 15A | 10A | 8.5A | 5.5A |
| Load regulation | ≤ 2% | | | ≤ 1% | |
| Ripple and noise | ≤ 160mVpp | ≤ 260mVpp | ≤ 300mVpp | ≤ 400mVpp | ≤ 550mVpp |
| Hold up time | ≥ 25ms | ≥ 20ms | ≥ 15ms | ≥ 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 | | | | |
| Status signals | <ul style="list-style-type: none"> • DC OK - green LED • OVERLOAD - red LED • DC OK - dry contact (NO, 24Vdc / 1A) | | | | |
| Parallel connection | <ul style="list-style-type: none"> • 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 | 2.4A | | 3.0A | | 2.4A |
| Vin = 240Vac | 1.2A | | 1.5A | | 1.2A |
| Input DC rated current | | | | | |
| Vin = 110Vdc | 2.5A | 2.6A | 2.5A | | 2.6A |
| Vin = 345Vdc | 1.2A | 0.9A | 1.2A | | 0.9A |
| Power factor correction | Active / > 0.9 | | | | |
| Inrush peak current / I ² t | ≤ 34A / 0.66A ² s | | | | |
| Touch (leakage) current | ≤ 0.6mA | | | | |
| Internal protection fuse | Fuse 6.3AT (not user replaceable) | | | | |
| Recommended external protection | Fuse 10AT or MCB 10A C curve / SPD | | | | |
| GENERAL DATA | | | | | |
| Efficiency | > 90% | | > 93% | | > 93.5% |
| Dissipated power | < 25W | | < 19W | | < 17W |
| Operating temperature | - 40°C...+ 70°C (UL certified up to 70°C) | | | | |
| Derating | No Derating | | | | |
| Lifetime expectancy / MTBF | 221'288h (25.2 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 | | | | |
| EMC Standards | EN61000-3-2, EN61000-6-2, EN61000-6-3 | | | | |