

WORLD FIRST!



NPS2400

**Advanced 3 Phase 2400W
DIN Rail Power Supply**

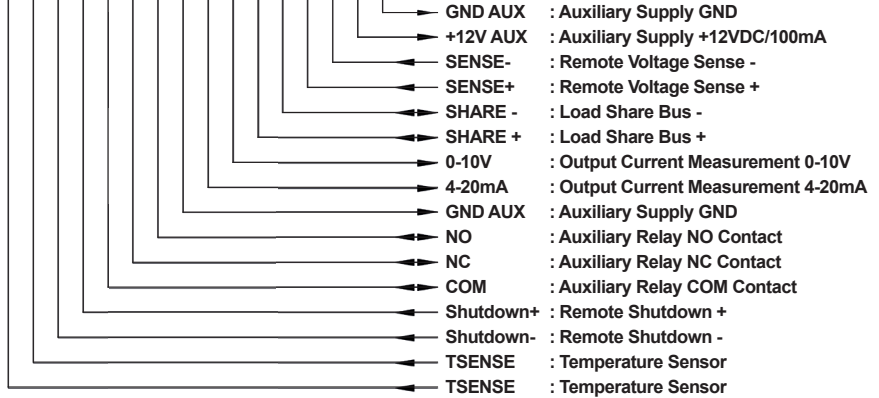
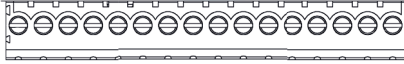
NPS2400 is a cost effective, breakthrough 2400W 3 phase input SMPS family for use in industrial environment. Up to **4 units** can be paralleled for increased power (9600W). The output is rated for 12, 24, 48, 72 and 170VDC (model dependent). Combining the latest digital and analog technology it reaches **very high efficiency, compact size, user friendly interface** and broad **range of applications** (standard power supply, battery charger, DC motor supply).

Main features:

- **High efficiency (>92%)** compact size and extremely **high power density (>10W/in³)**
- **Active PFC** to reduce the required input current to a minimum
- Operating also with **DC input**, suitable for renewable energy applications
- **Wide range of output voltage** (12...175V, model dependent)
- Integrated active **ORing circuit** for all models allows easy paralleling of devices for redundancy
- **Active input protection** against various mains abnormalities for extreme reliability
- User settable **output current limitation algorithm** (hiccup or constant current)
- **4-20mA** and **0-10V** output current remote measurement
- **Load share** bus (up to 4 units can be paralleled for power increase)
- **Operating modes:**
 - **Power supply with Overboost** - up to **150% of the rated current** (3.6kW) for 5 seconds
 - **Battery charger** for various chemistries with temperature compensation
- **Microprocessor** for **unit control** and **remote monitoring** through **USB**
- **Embedded user interface with LCD display:**
 - Displays **real time status and alarms**
 - History of **events/alarms, time stamped**
 - **Settings, ID information**
- **"POWERMASTER" PC and Android applications** through **USB interface** (**COMM BOX** included):
 - **Remote configuration** of the device
 - **Firmware upgrade**
 - **Replicates the embedded user interface** by adding the PC benefits

Technical Specifications	
Rated Input Voltage	3x400...500VAC, 47...63Hz or DC
Input Voltage Range	340...550VAC / 520...725VDC
Power factor correction	Active / >0.9
Input protections	<ul style="list-style-type: none"> • Active surge protection • Input overvoltage (auto restart) • Input undervoltage (auto restart) • Phase loss (reduced output power)
Rated output voltage	24V / 48V / 72V / 170V (model dependent)
Output voltage range	11.9...29V / 23...56V / 50...87V / 85...175V (model dependent)
Rated output current	100A / 50A / 33A / 14A (model dependent)
Peak output current	150A / 75A / 50A / 21A (for 5 seconds, model dependent)
Output protections	<ul style="list-style-type: none"> • Overload (with user settable threshold) • Short circuit • Overvoltage with latched shutdown
N+1 redundancy	Up to 4 units in parallel with integrated active ORing circuit
Parallel connection with current share	Up to 4 units (8.7kW total) using dedicated share bus connection Current sharing accuracy better than 5% @ 0.9*In
Efficiency	>92%
Power density	10.5W/in³ (0.64W/cm ³)
Operating temperature	-40...70°C, with derating above 50°C
Cooling method	Forced air cooling with variable air flow
Size and Weight	233x160x101mm / 2.8kg
Safety approvals	UL508, EN60950
EMC standard	EN61000-6-2, EN61000-6-4

Auxiliary Connector



POWERMATER Applications

PC version

POWERMASTER NPS2400

www.nextys.com

Status Settings Logs Help

Model: C (24V)

Device Name: NPS2400-24

Device S/N: 1182400030

Average Output Power: 26W

Average Output Current: 1A

Average Temperature: 50.6C

Power On Cycles: 66cycles

Operating Time: 7d 16h 8m 41s

Fan Operating Time: 6d 9h 45m 36s

Fan Speed (0-3): 0

Input Voltage: 371V

Output Voltage: 23.99V

Output Current: 16.2A

Output Power: 389W

Internal temperature: 42.7°C / 108.9°F

Environmental temperature: 21.6°C / 71.0°F

Print

Android version

Connected Rx:196 Tx:162

Pout max. 2400W

Uin min. alarm 340V

Uin max. alarm 520V

Uout 48V

Iout alarm 50A

Iout nominal 50A

Remote shutdown polarity High

Buzzer Enabled

Temperature unit °C

Operating mode Constant current

Wiring 3-Phases

Battery chemistry Lead acid

Battery nominal voltage 48V

Battery charge voltage ...

Battery capacity ...

Battery charge mode Normal

Dimensions

