



NSP-2400 - Series

New-generation 2400W AC-DC High-Reliability Compact Size Enclose Type Power With PFC



Driven by the growing demand for higher power and equipment miniaturization across industrial automation, semiconductor equipment, medical devices, and renewable energy systems, the market demand for high-power-density power supplies continues to rise. Following the successful launch of NSP-75/100/150/200/320/500/750/1000 Series, MEAN WELL expands the NSP family with new 2400W NSP-2400 Series, providing an ideal solution for compact, high-power equipment applications.

NSP-2400 inherits the advantages of NSP family, including outstanding reliability, high power density, and multifunctional integration. Compared with the previous-generation RSP-2400, the NSP-2400 features a 55% reduction in size, a wider 85–305Vac input range, and peak power output of 200% rated power. These enhancements enable the power supply to effectively handle high transient and peak power requirements from motors, pumps, capacitive loads, and other equipment.

In addition, NSP-2400 is equipped with built-in PV/PC functions, allowing output voltage to be flexibly adjusted from 0% to 120% and output current to be configured from 0% to 100% according to application requirements. Certified to Multi-Industry Safety Certifications and SEMI F47 voltage sag immunity requirements, and is backed by a 5-year warranty, which can meet long-term stability and reliability requirements of high-power systems. The NSP-2400 is well suited for a wide range of applications, including industrial automation, semiconductor equipment, medical devices, laser processing equipment, test and measurement systems, communications infrastructure, and renewable energy systems, making it an ideal power solution for high-power applications.



Technical Comparison:

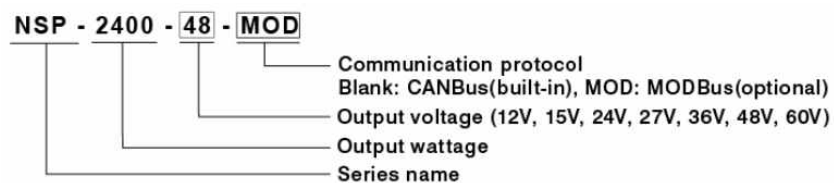
Model	New Generation 	Old Generation
	NSP-2400  AC-DC High Reliable Enclosed Power Supply with Built-in PFC	RSP-2400 AC-DC Built-in PFC Enclosed Power Supply
Vin	85 ~ 305Vac	180 ~ 264Vac
Output Wattage	2400W	2400W
Peak Power	200%	-
Vout	12V / 15V / 24V / 27V / 36V / 48V / 60V	12V / 24V / 48V
Efficiency	89% ~ 93%	88% ~ 91.5%
Operating Temp.	-40~+85°C (> +50~60°C derating, By model)	-20~+70°C (> +50°C derating)
Ultra-Wide Output Voltage Programmable (P.V)	0~120%	20 ~ 110%
Ultra-Wide Output Current Programmable(P.C)	0~100%	-
Parallel Function	9600W (3+1)	7200W (2+1)
Communication	CANBus (Built-in) / MODBus (By request)	-
DC OK Relay Contact	V	V
Remote Control (R.C)	V	V
Remote Sense (R.S)	V	V
Fan Noise	<46 dB	-
Leakage Current	<500 µA @277 Vac	<2 mA @ 240Vac
Isolation Level	2 x MOPP	-
Over Voltage Category	OVC III	-
PCB Conformal Coating	V	-
Safety Certification	CB / DEKRA / UL / RCM / BSMI / EAC BIS / KC / CE / UKCA / SEMI F47 62368-1 / 61558-1 / 60335-1 60601-1 / 61010-1 / 62477-1	CB / TÜV / UL / RCM / BSMI EAC / BIS / CE / UKCA 62368-1
Withstand Voltage(I/P - O/P)	4kVac	3kVac
EMC Immunity(ESD)	Contact ± 8KV Air ± 15KV	Contact ± 4KV Air ± 8KV
Dimensions (L x W x H)	325.8 x 107 x 41 mm (-55%)	278x 177.8 x 63.5 mm
Warranty	5 years	5 years

Features:

- 85~305Vac wide input range (277Vac Operable)
- Global certificates in multi-industries
(ITE 62368-1, Medical 60601-1, Household 60335-1, Industrial 61558-1/61010-1, Energy converter 62477-1 and SEMI F47)
- 200% peak power capability
- Programmable output voltage (0~120%) and output current (0~100%)
- Built-in CANBus communication protocol; optional Modbus support.
- Wide operating temperature range: -40 to +85°C (24~60V : Full load up to +60°C)
- Built-in low-noise cooling fan (<46 dB)
- Complete protections: Short circuit, overload, over voltage and over temperature

- Compliant with Overvoltage Category III (OVC III)
- Operating altitude up to 5000 meters
- Ultra-low leakage current <500 μ A, compliant with 2 $\times$ MOPP requirements and suitable for BF-type medical applications
- PCB conformal coating for enhanced durability
- 5 years warranty

Applications where you can use it:



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