

An integrated and durable power solution designed for telecom outdoor applications, supporting multiple power input sources such as grid, solar, generator, and battery. Engineered for high reliability and adaptability, it ensures continuous and stable operation in demanding environmental conditions.



GENERAL FEATURES

- Smart Energy Management
- Modular Design
- High-Efficiency MPPT Technology
- IP55-Rated Design
- Comprehensive Lightning Protection
- Intelligent Battery Management
- Multiple Input Modes for Seamless Supply
- Generator Compatible

SPECIFICATIONS

MODEL		NPS-C483006-PCM	NPS-C4860012-PCM
Cabinet	Size	W x D x H = 759 x 693 x 1430 mm (without air conditioner) W x D x H = 759 x 817 x 1430 mm (with air conditioner)	
	User Equipment Space	17U	13U
	Weight (kg)	130/145kg (without/with air conditioner)	160/175kg (without/with air conditioner)
Rectifier Module	Rated Power	3000W (standard) /4000W (optional)	
	Number (pcs)	1 to 6	1 to 12
	Size (mm)	W x D x H = 106.5 x 286 x 41.5 (±0.5 mm)	
	Weight (kg)	<2kg	
Solar MPPT Module	Rated Power	3000W	
	Number (pcs)	1 to 6	1 to 12
	Size (mm)	W x D x H = 106.5 x 286 x 41.5 (±0.5 mm)	
AC Input	Weight (kg)	<2kg	
	AC Input Rated Voltage	Single Phase 220Vac/Three-Phase 380Vac	
	AC Input Voltage Range	85Vac - 300Vac	
	AC Input Maximum Current	40A (Supports up to 2 modules with 1Phase Input)	80A (Supports up to 4 modules with 1Phase Input)
	AC Input Voltage Frequency	45-65Hz (Typical value 50/60Hz)	
PV Input	AC Power factor	20.99 (220 Vac Rated Load)	
	PV Input Ranges	120Vdc ~ 425Vdc (Start >160Vdc)	
	PV-Rated Input Voltage	340Vdc	
	MPPT Voltage Range	120Vdc ~ 340Vdc	
	Maximum Input Current of PV	17A	
	Maximum Input Voltage of PV	450Vdc	
Photovoltaic Module Reverse Pole Protection	Error input polarity, no damage		

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Output	Rectifier Output Voltage Range	- 43.2Vdc ~ -57.6Vdc (Typical : -53.5V)		
	Max System Capacity	18kW	36kW	
	PV Output Voltage Range	- 42Vdc ~ -58Vdc (Typical : -54.5V)		
	Voltage Stabilization Accuracy	≤ ±1%		
	Output Ripple & Noise	≤200mVp-p (Rated input voltage and load and bandwidth limit of 20 Mhz)	≤100mVp-p (Rated input voltage and load and bandwidth limit of 20 Mhz)	
	Current Sharing Imbalance	≤ ±5% (Within the 50-100% load range)	≤ ±3% (Within the 50-100% load range)	
	Rectifier Efficiency Options	≥93% / ≥95% / ≥96% (Optional)		
	PV Module Efficiency	≥96%		
	Startup Time	3-10 sec (The rated input voltage starts to the output voltage establishes to the setting value, The starting output needs to use the pre-flow limit function)		
	On/Off Overshoot Amplitude	Output fluctuation (≤5%) during module swap of any module (At this time the load current should not be greater than the total output current of the working modules)	Output fluctuation (≤3%) during module swap of any module (At this time the load current should not be greater than the total output current of the working modules)	
	Dynamic Response	Overshoot Amplitude	≤±5% (25%-50%-25% or 50%-75%-50% load change)	≤±1% (25%-50%-25% or 50%-75%-50% load change)
		Recovery Time	≤200µs (25%-50%-25% or 50%-75%-50% load change)	≤10µs (25%-50%-25% or 50%-75%-50% load change)
	Temperature Coefficient	<+0.02%/°C (For every 10°C change in temperature, the difference between the DC output voltage and the output voltage setting value should not exceed 0.02% of the output voltage setting value.)		
	Psophometrically Weighted Noise Voltage	≤2mV		
	Wide-Band Noise Voltage	3.4-150kHz	≤50mV	≤3mV
		0.15-30MHz	≤20mV	≤5mV
	Discrete Noise Voltage	3.4-150kHz	≤5mV	≤2mV
150-200kHz		≤3mV	≤1mV	
200-500kHz		≤2mV	≤1mV	
0.5-30MHz		≤1mV	≤1mV	
Recovery time	≤500mV			
Protection	AC Input Overvoltage	300Vac (self-recovery, return diff. ≥10Vac)		
	Photovoltaic Overvoltage	430Vdc (self-recovery, return diff. ≥15Vdc)		
	AC Input Undervoltage	85Vac (Can self-recover with a return diff. ≤5Vac)	80Vac (Can self-recover with a return diff. ≤5Vac)	
	PV Input Undervoltage	110Vdc (self-recovery, return diff. ≥40Vdc)		
	Rectifier Output Overvoltage	-59Vdc ~ -61Vdc (lock, restart needed)		
	PV Output Overvoltage	Int: -58.5 to -60.5Vdc; Ext: 63Vdc (lock, restart)		
	Output Undervoltage	Battery disconnect protection (monitor-controlled)		
	Output Limit	Present		
	Output Short Circuit	Present (auto recovery)		
	Overtemperature Protection	Auto recovery at 75°C		
	Battery Polarity Protection	Not present (optional based on user request)		
PV Undervoltage Protection	<50W input shuts down for 5 mins (<160Vdc input)			
Temperature Control	Cooling	Single or dual fan of 48 Vdc, 100W, P44, PWM with temperature regulation. (optional)		
		5000W 1000W 1500W AC/DC air conditioner (optional)		
	Heating (Optional)	500W heater		
Environmental	Operating Temperature	-40°C to 50°C	-15°C to 45°C	
	Storage Temperature	-45°C to 70°C	-40°C to 70°C	
	Relative Humidity	5%-95%		
	Altitude	≤4000m (derated above 3000m)		

*Product specifications and appearance are subject to change without further notice.

ORDERING INFORMATION

Part Number	Description
NPS-712DC1500-OC	IP55 Outdoor Cabinet with Fan and DC Air Conditioner 1500W
NPS-C0348I-RM	3kW 48VDC Rack Mount Inverter
NPS-C483006-PCM	48VDC 300A PV Charge System with monitor module and SNMP Card with slots of MPPT module 48VDC 50A x 6
NPS-C4850S-CM	48VDC 50A Solar Charge Module
NPS-C20048-LI	48VDC 200Ah Rack Mount LifePO4 Battery Pack
NPS-712SSDC1500-OC	IP55 Stainless Steel 304 Outdoor Cabinet with Fan and DC Air Conditioner 1500W
NPS-C4860012-PCM	48VDC 600A PV Charge System with monitor module and SNMP Card with slots of MPPT module 48VDC 50A x 12