

# DR PCS *Off-Grid Inverter*

**DR-PCS5520N2FL02**

## Product Introduction

This ultra-slim, wall-mounted, air-cooled energy storage inverter is designed for home use. It features a minimalist and elegant design, making installation efficient and straightforward. Utilizing fully digital dual closed-loop control for voltage and current, combined with advanced SVPWM technology, it delivers high-precision pure sine wave output with stable performance, safety, and reliability.

## Features and Functions

- 5.5kW full power output
- Supports parallel connection of up to 3 units
- Integrated UPS functionality
- Compatible with multiple battery protocols
- Supports PV and utility power input
- Remote monitoring and cloud platform firmware upgrades supported
- Can operate in grid-connected mode (without grid certification)
- Multiple input and output mode switching
- Supports various types of batteries
- IP20 protection Level

# DR-PCS

| Product Model | DR-PCS5520N2FL02 |
|---|---|
| Rated Output Power | 5500VA/5500W |
| **PV Input** | |
| PV Input Strings | 1 String |
| Maximum PV Array Power | 6000W |
| Maximum MPPT Efficiency | 99.5% |
| Maximum PV Open-Circuit Voltage | 500Vdc |
| MPPT Operating Voltage Range | 120~450Vdc |
| Start-Up Voltage | 160Vdc |
| Maximum Input Current | 15A |
| Short-Circuit Current (ISC) | 18.7A |
| **AC Input (Grid)** | |
| Rated Voltage | 230Vac |
| Selectable Voltage Range | 170~280 Vac (PC) 90~280 Vac (Household Appliances) |
| Frequency Range | 50Hz / 60Hz (Adaptive) |
| Maximum AC Input Current | 28A |
| Maximum AC Input Voltage | 300Vac |
| **AC Output (EPS)** | |
| Rated Output Voltage | 230Vac±5% |
| Output Voltage Range | 220~240Vac |
| Rated Output Frequency | 50/60Hz |
| Rated Output Current | 230Vac@23.9A |
| Surge Power | 11kVA |
| Peak Efficiency of Battery Inverter | 93% |
| Peak Efficiency of PV Inverter | 96% |
| Transfer Time | ≤20ms |
| Waveform | Pure Sine Wave |
| Output Overload Capacity | 10s@110%~150% Load |
| **Battery** | |
| Battery Type | Lead Acid + Lithium Battery |
| Battery Voltage Range | 43-60Vdc |
| Charging Curve | Three-Stage |
| Lithium Battery Charging Strategy | Adaptive to Lithium Batteries |
| Max. Solar Charging Current | 80A |
| Max. AC Charging Current | 60A |
| Max. Discharge Current | 100A |
| **Protection Features** | |
| Protection Level | IP20 |
| AC Input | Over/Under Voltage, Over/Under Frequency, Input Derating Alarm |
| PV Input | Photovoltaic Over/Under Voltage, Reverse Connection |
| EPS Output | Short Circuit, Overload |
| Battery | Over/Under Voltage, Low Voltage Alarm |
| Other Protective Measures | Over Temperature Protection, Over Temperature Derating Pre-Alarm |
| **General Parameters** | |
| Certifications | IEC61000/IEC61683/IEC62109 |
| Machine Dimensions | 509*310*118±2mm |
| Packaging Dimensions | 582*396*190±2mm |
| Net Weight | 10±0.2kg |
| Gross Weight | 11.8±0.2kg |
| Communication Interface | RS232 / RS485 / CAN / Dry Contact |
| Relative Humidity | 5% to 95% Relative Humidity（Non-condensing） |
| Operating Temperature | -10℃ to 50℃ |
| Storage Temperature | -15℃ to 60℃ |
| Max. Operating Altitude | ≤2000m |
| Cooling Method | Fan cooling |