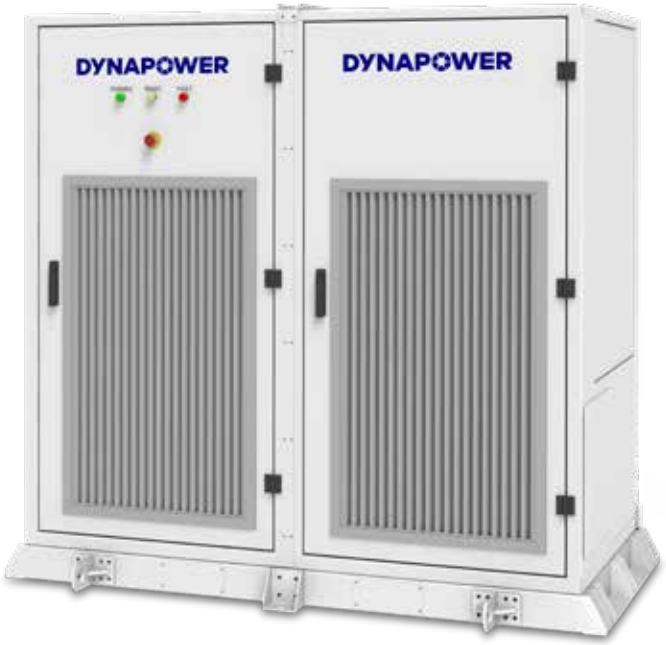
DYNAPOWER
Part of Sensata Technologies

CPS-2500 Energy Storage Inverter

Industry-Leading Power Density, Flexibility, and Response Time

Featuring a highly efficient three level topology, the CPS-2500 inverter is purpose-built for energy storage applications, providing the perfect balance of performance, reliability, and cost-effectiveness.



The CPS-2500 is a 1169kVA to 2672kVA bidirectional four quadrant capable converter. Available in outdoor-rated configurations, units can be paralleled for project size scaling to meet the needs of any grid-tied or microgrid application.

Capable of connecting to an 800VAC 3 phase grid connection, the CPS-2500 offers industry-leading power density and efficiency. The CPS-2500 allows DC input configuration flexibility to enable large duration battery connections or reduce balance of system costs through input consolidation.

The CPS-2500 inverter contains all required protective features, including an AC output breaker and DC pre-charge. This creates a cost savings compared to other inverters that require additional items for battery integration.

System Advantages

- Seamless transfer from grid-tied to stand-alone mode with patented Dynamic Transfer feature
- Scalable to any grid-tied or microgrid application with paralleled units
- Cost savings by eliminating additional purchase of protective features
- Certified to UL 1741 Ed. 3, including SB smart inverter requirements

Key Technologies

- Islanded Operation (UF Mode)
- Dynamic Transfer
- Black Start (In-Rush Current Handling in UF Mode)
- Frequency Compensation Mode (F-Comp)
- VAR Compensation Mode (E-Comp)
- AC Current Limiting
- LVRT with Active Current Injection
- Multiple Parallel Inverter Microgrid Mode

TECHNICAL SPECIFICATIONS

Electrical

AC Input Voltage:	**800V_{AC} / 690V_{AC} / 660V_{AC} / 630V_{AC} / 600V_{AC} / 540V_{AC} / 480V_{AC} / 415V_{AC} / 350V_{AC}**
Grid Frequency:	**60 Hz**
Maximum Apparent Power:	**2672 kVA (@ 800V_{AC}) 2304 kVA (@ 690V_{AC}) 2204 kVA (@ 660V_{AC}) 2104 kVA (@ 630V_{AC}) 2004 kVA (@ 600V_{AC}) 1803 kVA (@ 540V_{AC}) 1603 kVA (@ 480V_{AC}) 1386 kVA (@ 415V_{AC}) 1169 kVA (@ 350V_{AC})**
Maximum Real Power:	**2672 KW (@ 800V_{AC}) 2304 KW (@ 690V_{AC}) 2204 KW (@ 660V_{AC}) 2104 KW (@ 630V_{AC}) 2004 KW (@ 600V_{AC}) 1803 KW (@ 540V_{AC}) 1603 KW (@ 480V_{AC}) 1386 KW (@ 415V_{AC}) 1169 KW (@ 350V_{AC})**
Maximum AC Current:	**1928A_{RMS}**
DC Voltage Range:	**511-1500V_{DC} (@350-800V_{AC})**
Maximum DC Current:	**2340A_{DC}**
Power Factor:	**Four Quadrant**
Current Harmonics:	**IEEE 1547 Compliant, <5% TDD**
Maximum Efficiency:	**98.58 @1500V_{DC} & 98.70 @1280V_{DC}**

Environmental

Operating Temp:	**-30 to +60°C, De-rated above +45°C**
Max Elevation:	**1000 Meters Full Power Up to 3000 Meters with Derating**
Cooling:	**Forced Air Cooled**
Enclosure:	**NEMA 3R/IP 54**
Dimensions (HxWxD):	**79.72" x 85.04" x 43.3"**
Weight:	**4,420lbs**

Certifications & Standards Compliance

- UL1741 Ed. 3
- IEEE 1547
- CSA 22.2 #107.1
- IEEE 519

Hardware Protections

- AC Breaker with Shunt Trip
- AC Surge Protection
- DC Input Fuses
- DC Pre-Charge

Software Protections

- Battery Voltage and Current Curtail Limits to Protect Battery
- AC Current Limiting Pending
- DC Over/Under Voltage, Over Current Faults
- AC Over/Under Voltage, Over/Under Frequency, Over Current Faults
- Anti-islanding Protection (Open Phase at Inverter Terminals)
- Temperature Monitoring and Protective Power Curtailment

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POWERING A CLEANER PLANET

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