MPS-125 Energy Storage Inverter

The world’s most capable microgrid inverter

This parallelable 125kW energy storage inverter is transformer-less, air-cooled, and compact, and optimized for behind-the-meter energy storage applications.

Featuring a highly efficient three-level topology, the MPS-125 is easily integrated into customer supplied battery storage systems or can be supplied as part of Dynapower’s fully-integrated MPS-i energy storage system. Multiple MPS-125 energy storage inverters can be paralleled together to scale to meet the needs of any behind-the-meter energy storage installation.

With all the functional capabilities of the grid-scale CPS inverter family, the MPS-125 supports frequency, voltage, and VAR support applications.

With our patented Dynamic Transfer™ feature, the MPS-125 inverter monitors grid stability and will automatically disconnect and transition to stand-alone mode if a grid disturbance is detected, ensuring consistent power to critical loads.

Key Technologies

- Islanded Operation (UF Mode)
- Dynamic Transfer
- Black Start
- Frequency Compensation Mode (F-Comp)
- Volt-Var Compensation Mode (E-Comp)
TECHNICAL SPECIFICATIONS

**Electrical**

- **AC Input Voltage:** 480V<sub>ac</sub> 3 Phase
- **Grid Frequency:** 60 Hz
- **Rated Output Apparent Power:** 125kVA
- **Rated Output Real Power:** 125kW
- **Rated Output Current:** 150A<sub>rms</sub>
- **Overload AC Current:** 180A<sub>rms</sub>
- **DC Voltage Range:** 740-1500V<sub>dc</sub>
- **Max DC Current:** 171A<sub>dc</sub>
- **Power Factor:** 0 – 1.00 Leading or Lagging
- **Current Harmonics:** IEEE 1547 Compliant, <5% TDD
- **Maximum Efficiency:** 98.7%
- **CEC Efficiency:** 97%

**Environmental & Mechanical**

- **Operating Temp:** -25 to +50°C, De-rated from +45 to +50°C
- **Cooling:** Forced Air Cooled
- **Enclosure:** UL 3R/IP 54
- **Max Elevation:** 1000 Meters Full Power
  Up to 3000 Meters with Derating
- **Dimensions (H x W x D):** 36” x 28” x 15.25”
- **Weight:** 176 lbs

**Certifications & Standards Compliance**

- UL 1741 SA
- IEEE 519
- IEEE 1547
- CSA 22.2 #107.1
- NFPA 70

**Hardware Protections**

- AC Breaker with Shunt Trip
- AC Surge Protection
- DC Disconnect
- DC Input Fuses
- DC Pre-charge (Optional)

**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
- Watchdog Timer to detect loss of communications

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**Dynapower**

85 Meadowland Drive
South Burlington, Vermont USA 05403
dynapower.com

**MC² Energystorage**

101 Quarry Drive
Milford, Massachusetts USA 01757
1.800.821.6412
mc2energystorage.com

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