

MPS-125 Energy Storage Inverter

The world's most capable microgrid inverter

This bi-directional 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. 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 _{AC} 3 Phase
Grid Frequency:	60 Hz
Rated Output Apparent Power:	125kVA
Rated Output Real Power:	125kW
Rated Output Current:	150A _{RMS}
Overload AC Current:	180A _{RMS}
DC Voltage Range:	740-1500V _{DC}
Max DC Current:	171A _{DC}
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
Max Elevation:	1000 Meters Full Power Up to 3000 Meters with Derating
Dimensions (H x W x D):	42.5" x 29.5" x 15.5"
Weight:	230 lbs

Certifications & Standards Compliance

UL 1741 Ed. 3	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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