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MPD-MT-UPS-3P-208Y.120V-100KVA-208Y.120V-R1-N1

100 KVA Uninterruptible Power Supply (UPS) Inverter System – 208Y/120V 60Hz 3PH Input, 208Y/120V 60Hz 3PH Output – 75 KW – 125 VDC Station Battery

Product ID: 330941

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image: MPD-MT-UPS-3P-208Y.120V-100KVA-208Y.120V-R1-N1

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

MPD-MT-UPS-3P-208V-75KVA-208V-R1-N1 Inverter System (UPS Functionality)

Unit Type: Inverter System – Online Double Conversion, Parallel Modular, N+1 Redundant

Dimensions: *Floor-Mounted Cabinets; dimensions vary by inverter, bypass, and battery configuration*

Weight: *Varies by cabinet configuration*

Input Voltage: 208V AC, Line-to-Line, Three Phase, 4-Wire + Ground, +10% / −15% (without affecting output)

Input Frequency: 60 Hz ±5%

Load Power Factor Range: 1.0 to 0.8 lagging

Input THD: ≤5%

Output Voltage: 208V AC, 3-Phase, 3-Wire + Ground

Output Frequency: 60 Hz

Regulation: ±1% steady state

Voltage THD: ≤5% (linear load), ≤7% (50% non-linear load)

Load power factor range: Unity power factor with the ability to support 0.8 leading to 0.8 lagging without derating

Efficiency in double conversion mode: ≥89% at full rated kW

Parallel capability: Parallel modular operation with N+1 redundancy

Output Power Capacity: 100 kVA / 75 kW

Ratings/Approvals

Max Configurable Power: 100 kVA / 75 kW
Inverter Modules: (6) × 15 kVA / 12.5 kW inverter modules, (1) additional inverter module for N+1 redundancy
Module Type: Hot-swappable, front-accessible
Crest Factor: 3:1, Double Conversion Online
Waveform Type: Sine Wave
Nominal DC Voltage: 125 VDC
DC Voltage Window: +20% / −25%
Battery Type: Station Battery System
Battery Protective Device: Provided per inverter module, lockable in OFF position
Charging Method: External charger per station battery system
Recharge Time: Per station battery system design
Backup Time: 15 minutes @ 75 kW full load
kAIC: ≥10 kA symmetrical (minimum), system-coordinated
Filtering: Full-time multi-pole noise filtering; IEEE C62.41 compliant surge protection
Interface: RS-232, Ethernet (RJ-45), Modbus / SNMP capability
Pre-Installed SmartSlotT Cards: AP9619
Control Panel: Front-mounted control/indicator panel with digital metering
Audible Alarm: Audible and visual alarms for inverter, battery, bypass, and system faults
Emergency Power Off (EPO): Yes
Operating Temp: 0°C to 40°C (32°F to 104°F)
Operating/Storage Relative Humidity: 0-95% non-condensing
Operating Elevation: 0-10,000`
Storage Temp: −20°C to +60°C (−4°F to +140°F)
Storage Elevation: 0–40,000 ft
Materials: Heavy-duty steel cabinets
Hardware Material: Zinc Plated Steel
Enclosure Finish: Aluminum Lacquer Paint
Mount: Floor-Mounted Cabinets
Input Connections: Hardwire, 4-Wire (3PH + N + GND)
Output Connections: Hardwire, 4-Wire (3PH + N + GND) (Battery Backup)
Bypass: Integral Static Bypass Transfer Switch and External Maintenance Bypass – Make-Before-Break (Closed Transition)
All grounding shall comply with state and local codes and meet the minimum requirements of the National Electronic Code section 250

Special Orders - Special Requirements
Contact us for special requirements
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The MPD-MT-UPS-3P-208Y.120V-100KVA-208Y.120V-R1-N1 is an Industrial Inverter System with UPS functionality designed for critical loads in work sites, substations, and large facilities. This battery-backed inverter system operates on three-phase 208Y/120V AC input and three-phase 208Y/120V AC output and provides uninterrupted power through an online double-conversion design. An integrated control panel with digital display enables real-time monitoring, status indication, and system control.

The MPD-MT-UPS-3P-208Y.120V-100KVA-208Y.120V-R1-N1 provides reliable battery backup support for customer-provided equipment in critical power applications. This 100 kVA / 75 kW parallel modular inverter system features three-phase 208Y/120V AC, 60 Hz (±5%) input and three-phase 208Y/120V AC, 60 Hz output. The system is configured with multiple hot-swappable inverter modules arranged in an N+1 redundant architecture, ensuring continuous operation during maintenance or module failure. Power is supplied from a 125 VDC station battery system, providing 15 minutes of backup runtime at full 75 kW load.

This sine-wave inverter system includes an integral static bypass transfer switch and an

external make-before-break (closed-transition) maintenance bypass, allowing the inverter system to be isolated without interrupting the critical load. The system features full-time multi-pole noise filtering, coordinated fault protection, and comprehensive audible and visual alarms for inverter, battery, overload, and bypass conditions. The front-mounted control panel provides detailed system metering, including input/output voltage, current, frequency, kW, kVAR, kWh, battery voltage, and battery current.

Wiring: This system accepts hardwire 4-wire (3PH + N + GND) input connections. Output connections are provided via hardwire 4-wire (3PH + N + GND) terminals for battery-backed critical loads.

Mounting: The MPD-MT-UPS-3P-208Y.120V-100KVA-208Y.120V-R1-N1 is supplied in floor-mounted, heavy-duty steel cabinets with front access for maintenance and service.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

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Frequently Asked Questions (FAQ)

There are no Faqs

Export Control Classification Number (ECCN): EAR99

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- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/330941.JPG)
- **Video1**(https://www.youtube.com/watch?v=LCYOu15ez4s)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
- **Business Certificate**(https://www.larsonelectronics.com/images/pdfdocs/w9.PDF)
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