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MT-UPS-1P-480V-15KVA-120V-R1-N1

15 KVA Industrial Uninterruptible Power Supply – 480V AC Input (Derived from 3-Phase Source), 120V AC Single-Phase Output – 125V DC Stationary Battery Input

Product ID: 331530

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

Image: MT-UPS-1P-480V-15KVA-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.

MT-UPS-1P-480V-15KVA-120V-R1-N1 Uninterruptible Power Supply

Unit Type: Uninterruptible Power Supply - Online Double Conversion

Dimensions: 78" × 30" × 36" (H × W × D)

Weight: 1,300 lbs (590 kg)

Ratings/Approvals

Input:

Rated Power: 15 KVA

Normal AC Input Source: 480 VAC, derived from facility 3-Phase source (UPS rectifier configured for single-phase operation)

Input Phase (UPS): Single Phase (1Ø)

Rated Input Frequency: 60 Hz (50/60 Hz capable)

Power Factor: ≥ 0.99

Rectification: 12-Pulse Hybrid Rectifier with Active IGBT Regulation

Input THD: < 5% THD (with input harmonic filter)

Input Isolation: Isolation Transformer – Included

Bypass:

Bypass Type: Static Bypass with External Manual Maintenance Bypass

Bypass Input Voltage: 120 VAC, Single Phase
Rated Frequency: 60 Hz ±5%
Bypass Source: External Bypass Voltage Matching Transformer (Included)

Output:
Rated Power: 15 kVA (Continuous Duty)
Rated Output Voltage: 120 VAC
Phase: Single Phase (1Ø)
Rated Output Frequency: 60 Hz
Crest Factor: 3:1, Double Conversion Online
Waveform Type: Pure Sine Wave (True Online Double Conversion)
Static Stability: ±1% steady state
Dynamic Stability: ±4% for 100% step load in <1 ms
Output Isolation: Isolation Transformer – Included
Output Circuit Breaker: Included

Batteries:
Battery Type: Stationary DC Battery System (By U.S.B.R.)
Battery Voltage: 125 VDC
Battery Charging: Simultaneous battery charging while supplying load
Battery Test Function: Included
Battery Temperature Compensation: Included (Adjustable)

Controls & Monitoring:
Display: 7" Touchscreen HMI
Mimic Panel: Included with Keyboard
Monitoring: Web-Based Monitoring via Ethernet
Communications: Modbus RTU / TCP, RS-232 / RS-485 / Ethernet
Alarm Outputs: Voltage-free Dry Contacts for Remote Annunciation
Data Logging: Included
Real-Time Clock: Included

Protection & Safety:
Emergency Power Off (EPO): Included
Protection Devices: Input Circuit Breaker, Battery Circuit Breaker, Bypass Circuit Breaker, Inverter Output Circuit Breaker, UPS Output Circuit Breaker

Operating Modes: Normal (Online) Mode, Battery (Emergency) Mode, Failure Mode, Recharge Mode, Static Bypass Transfer to Bypass Source, Static Bypass Transfer to Inverter Output, Maintenance Bypass Mode, Off-Battery Mode (Battery Maintenance)
Materials: -
Hardware Material: -
Mount: Floor Standing (Surface Mount)
Input Connections: Hardwire – Single-Phase AC Input (Derived from 480 VAC 3-Phase Facility Source)
Output Connections: Hardwire – 120 VAC Single-Phase Output (Battery Backed)
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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E-mail: sales@larsonelectronics.com

The MT-UPS-1P-480V-15KVA-120V-R1-N1 is an Industrial Uninterruptible Power Supply (UPS) designed for utility, control power, and critical infrastructure applications in substations, power plants, and industrial facilities. This battery backup unit operates

from a 480V AC facility power source (derived from a three-phase supply) and features a true online, double-conversion topology utilizing IGBT-SPWM inverter technology with hybrid 12-pulse rectification and IGBT regulation. A front-mounted 7-inch touchscreen HMI with mimic panel and keyboard enables real-time monitoring, configuration, and system diagnostics.

The MT-UPS-1P-480V-15KVA-120V-R1-N1 provides continuous, regulated battery-backed power support for customer-provided equipment in industrial and utility environments. This 15 kVA UPS accepts 480V AC input power derived from a three-phase source and delivers single-phase 120V AC output for compatibility with protection relays, SCADA systems, communications equipment, and control loads. The system operates continuously while simultaneously charging a customer-supplied 125V DC stationary battery system. Input and output isolation transformers, static bypass, external manual maintenance bypass, and an external bypass voltage matching transformer are included to ensure uninterrupted operation and safe maintenance.

This pure sine-wave UPS features full-time online double-conversion operation with input harmonic distortion below 5%, voltage regulation within ±1%, and fast dynamic response to load changes. Integrated protection includes input, battery, bypass, inverter output, and UPS output circuit breakers, as well as an Emergency Power Off (EPO) function. Monitoring and communications capabilities include web-based Ethernet monitoring, Modbus communications (RS-232 / RS-485 / Ethernet), alarm dry contacts for hard-wired annunciation, data logging, battery test functionality, real-time clock, and adjustable battery temperature compensation.

Wiring: This unit accepts hardwired single-phase AC input connections derived from a 480V AC facility source. The output is provided via hardwired 120V AC single-phase battery-backed connections.

Mounting: The MT-UPS-1P-480V-15KVA-120V-R1-N1 is a floor-standing unit suitable for surface-mount installations.

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

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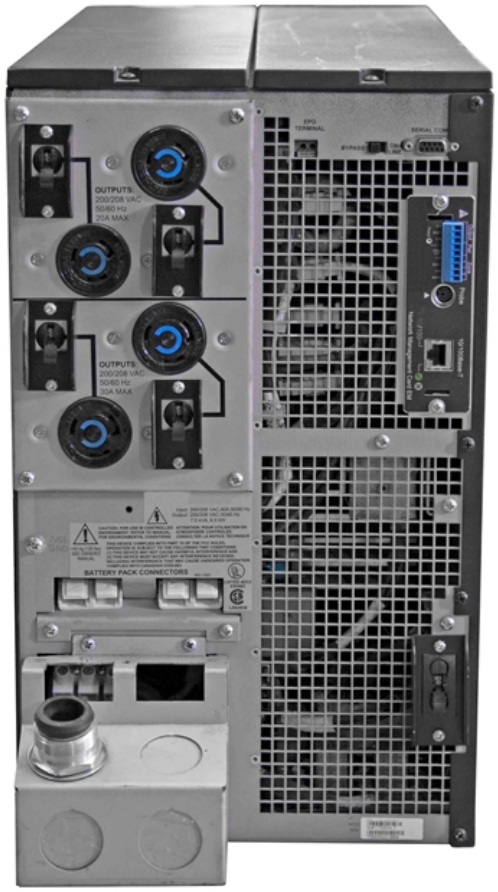

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