



CMN LX Series

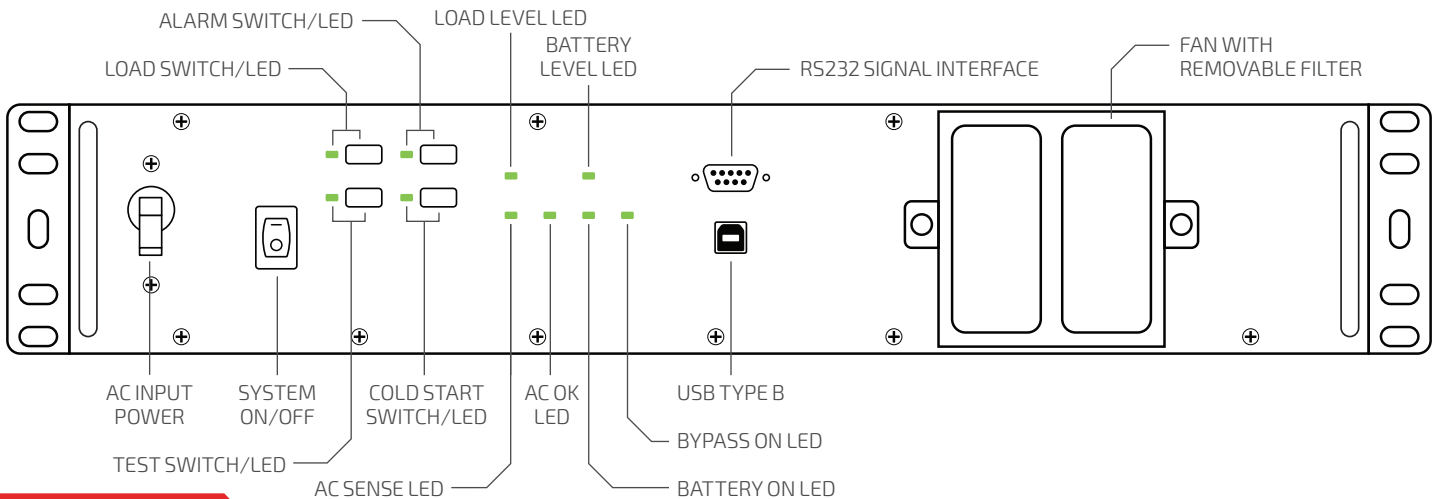
Customizable UPS products for naval shipboard applications



Overview

The CMN LX Series is a newly designed series of UPS that integrates Clary's proven digital UPS architecture with the most current electronic components. Tailored for military shipboard applications and other similarly demanding installations, the CMN LX Series is designed with reduced height, depth and weight. All designs share a common user experience, interchangeable and customizable elements to

facilitate integration and maintenance. The CMN LX Series is highly configurable, with selectable transformer isolation and firmware. Supports external, expandable and field-configurable battery options—NPX, VRLA, Cyclon SLA or lithium. Available in 6 models with power levels from 2500 VA to 4800 VA, CMN LX Series meets a host of military standards including 1399, 461, 167, 901D and 810 G.



Features

- Minimized Size, Weight and Power (SWaP) improves flexibility and performance
- Space saving design: 2U vertical rack space
- On-line double conversion technology
- 18" depth fits submarine racks
- External, expandable and field configurable battery
- Isolation can be configured based on available ship power
- Operates in extreme environments from -20°C to +55°C (-4°F to +131°F)





Specifications

Electrical Input

Voltage	<ul style="list-style-type: none"> LX models 115 VAC (external transformer) LXI models 115 or 230 VAC (internal transformer) GXI models 115 or 230 VAC (internal transformer)
Frequency	60 Hz (LX, LXI) 50 Hz or 60 Hz (GXI)
Isolation	External/internal transformer with bypass auto ranging (TapSelect)

Electrical Output

Voltage	<ul style="list-style-type: none"> LX models 115 VAC LXI models 115 VAC GXI models 230 VAC
Frequency	60 Hz
Crest Factor Ratio	<ul style="list-style-type: none"> 50% load up to 4.8:1 75% load up to 3.2:1 100% load up to 2.4:1
THD	4.00% maximum
Dynamic Response	±4% for 100% step load change 0.5 ms recovery time
Overload	<ul style="list-style-type: none"> 110% for 10 sec 200% for 50 ms
UPS Protection	Circuit breaker

Environmental

Temperature	-20°C to +55°C (-4°F to +131°F)
Humidity	0% to 95% non-condensing
Altitude	Sea level to 10,000 ft
Noise Level	46 dBA at 5 ft

Mechanical

Input	NEMA L5-30P plug with 6 ft cord
Outputs	NEMA Type 5-20R receptacles
Cooling	Low velocity forced air with user-selectable direction of airflow

Design

Standard Features	<ul style="list-style-type: none"> Power factor corrected input Fully regenerative True on-line continuous power Low distortion sine wave output Designed for non-linear loads Extended brownout protection EIA/RS232 data interface
Compliance	Military standards 1399, 461, 167, 901D

Control and Indicators

Visual Indicators	<ul style="list-style-type: none"> Battery level Load level AC Sense AC OK Bypass on Battery on
Switches / Control Panel	<ul style="list-style-type: none"> System power Cold start Battery test
Audible Alarms	<ul style="list-style-type: none"> Over current Over/under voltage Inverter Fans Temperatures Bypass Battery on
Intelligent Computer Interfaces	USB 2.0 and RS232 serial data interface
Contact Closures	<ul style="list-style-type: none"> DB-9 Open collector

Options

Isolation	Configurable 1U rack-mounted single phase toroidal transformer. Unit supports 115, 230 and 440 V in from ship.
External Battery Pack	Cyclon (DT), VRLA (NPX), Lithium LiFePO4 (K2)
Miscellaneous	<ul style="list-style-type: none"> Fast charger Conformal coating RE 101 shielding Slide rails Dry contact signal port
SNMP Interface	Allows full control and monitoring interface over network connection.
Display	4×20 backlit LCD

Configurations

Model	VA	Watts	Input Current	Output Current	Rating	Weight	Rackmount H × W × D
CMN 2500LX	2500	2000	22 A ¹	20.8 A	2500 VA / 2000 W	26 lb	3.5" × 19.0" × 18.0" (2U)
CMN 2500LXI	2500	2000	22 A	20.8 A	2500 VA / 2000 W	57 lb	3.5" × 19.0" × 20.0" (2U)
CMN 2500GXI	2500	2000	22 A ^{2 3}	20.8 A	2500 VA / 2000 W	26 lb	3.5" × 19.0" × 18.0" (2U)
CMN 3000LX	3000	2500	28 A	25 A	3000 VA / 2500 W	26 lb	3.5" × 19.0" × 18.0" (2U)
CMN 4000LX	4000	3400	38 A	33 A	4000 VA / 3400 W	27 lb	3.5" × 19.0" × 18.0" (2U)
CMN 4800LX	4800	3400	38 A	40 A	4800 VA / 3400 W	26 lb	3.5" × 19.0" × 20.0" (2U)

¹ In bypass mode input current is equal to output current

² Optional 20 A limit

³ 11 A at 240 V