

NextGen UL924 UPS for Elevator & Emergency Lighting



Revolutionizing power protection equipment with the NextGen UPS. 30KW Cabinet & 60KW Cabinet (other KW available consult factory)



Introduction

The NextGen UPS is redefining power protection that simplifies installation, maintainability with high power density, high efficiency, long life expectancy, fault tolerance, peak shaving, energy regeneration and grid re-injection ready.

The only UPS of its kind combining mission critical functions with energy saving features.

The NextGen UPS UL924 Series provides our customers a revolutionary method to harvest energy that would be otherwise lost. While providing an unmatched ROI, the NextGen UPS help reduce energy consumption and increase the building energy efficiency. Harvesting and Storing Energy from an Elevator is allowing our customers to Reap the benefits of a full modular zero downtime power backup system with energy savings and carbon foot print reduction. It provides unmatched performance to ensure the continuity of your operation with multiple redundancy, high efficiency, easy maintenance, and offering low Total Cost of Ownership (TCO).



- Double Conversion On-Line Topology
- Compact footprint and robust design
- Hot-swappable
- Modular design (scalable)
- No single point of failure
- On-line double conversion (galvanic insulation)
- Ultra-low MTTR
- Network manageability
- Standard 5 years warranty

Features and Benefits

Superior performance and power protection with best-in-class high power density, long life expectancy, and efficiency for Data Center, Edge Computing, Telecom, and Industrial applications.

NextGen UPS - 30 kW /60kWHr





NextGen UPS - 60 kW /120kWHr

Illustrations are non-binding and may include customized fittings.

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Q United States, Belgium, China, India, Luxembourg, Malaysia, Russia, United Kingdom, Australia & Germany



In the NextGen UPS, all converters are hot-swappable and replaceable by untrained personnel, whereas the battery blocks can be serviced with the system on-line. No interruption during maintenance periods, no interruption ever. With a couple more modules in the same bay, the most demanding businesses will enjoy N+1 fault-tolerant construction at the lowest cost and unbeatable user experience. The NextGen UPS is highly recommended with poor and unreliable grids. All disturbances are filtered by permanent double conversion with power factor correction.

Used in conjunction with the advanced Inview controller the system offers real-time monitoring and remote monitoring of system faults. This unique, integrated solution, at the leading edge of power electronics and storage chemistry offers an incredible mix of low maintenance burden and very low MTTR.

Uptime and Power:

- · Hot-swap modules does not require to be reconfigured
- · Automatic phase balancing makes it generator friendly
- Fail-safe design equal to Zero Downtime
- Available in 48Vdc or 380 Vdc bus
- Battery Agnostic: Compatible with many batteries' chemistries including, Lead Acid, Nickel Zinc, NiCad, NiMH, Lithium based, Sodium-Ion, and Sodium Nickell

Energy Bill Savings

- Grid Re-injection ready
- Peak Shaving
- Phase Balancing
- Built-in power factor correction

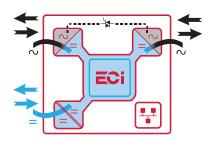
Simplicity:

- All Plug and Play
- · No need for a costly maintenance contract. The modules are very low maintenance while used in indoor clean room conditions
- · All modules are lightweight to be handled by a single technician with no special tool required
- Easy capacity expansion

Manageability:

- Built-in Web/SNMP management
- MODBUS TCP
- 7" LCD display
- Audible alarms Serviceability

The ECI Technology inside...



Our Patented Multi-Directional Power Converter:

- Allows energy to flow from source to load and vice versa
- Provides harmonious mix of multiple energy sources including stored energy and renewables
- Is modular and hot-pluggable
- Adapts to varied customer requirements with flexible, customized configurations



NextGen UPS Three phase

	NextGen UPS - 47 kW - 1 cabinet	NextGen UPS - 101 kW - 2 cabinets				
General						
Topology	Online Double Conversion					
Power Rating (for more details, refer table 2 on page 4)	57 kVA / 47 kW	123 kVA / 101 kW				
UPS Manual Bypass	Optional external manual bypass					
Environmental						
Operating Temperature Range / Storage Temperature Range	15 to 40°C Ambient /	-20 to 70°C Ambient				
Storage Relative Humidity / Operating Relative Humidity	10% - 95% non-condensing / 20% - 90% non-condensing					
Altitude	< 1500 m: No derating, > 1500 m: Derating of 0.8% per 100m					
Audible Noise	<60 dBA @ 1 meter from surface					
Power						
AC Input Data (for rating, refer table 1 on page 4)						
Nominal Input Voltage	120 / 240 split phase / 3x208 Vac + N three pha	se (for rating and power, refer table 1 on page 3)				
Input Voltage Range	108 - 140 Vac L-N / 216 - 280 L-L / 3 x 187 - 3 x 242 Vac					
Input frequency synchronization range	57 - 63 Hz					
Input Power Factor	> 0.99 typical					
AC Output Data (for rating, refer table 2 on page 4)						
Peak Efficiency AC to AC / DC to AC @80% load	94.5% / 91.9%					
Output Voltage	120 / 240 split phase / 3x208 Vac + N three phase (for rating and power, refer table 2 on page 3)					
Frequency / accuracy on battery	60 Hz / 0.03%					
Short time overload capacity	125% for 15 seconds					
Output THD	< 1.5% with resistive load, $< 5%$ with non-linear load					
Crest Factor at Nominal Power	3:1					
Waveform	Pure Sine Wave					
Output Voltage stability static / dynamic	\pm 1.0% from 10 to 100% load / \pm 5% recovering time below 0.5 sec from 0 to 100% impact					
Battery Characteristics						
Battery Type	Integrated, Sealed, Non-spillable					
Battery Replacement	Field-replaceable					
Battery Technology	Various					
Transportation	Air ride and strap to truck					
UPS run time on battery	90 min 90 min					
Communications						
Ports	2 x Ethernet, 1 x Modbus (RS485), TCP/IP, SNMP Protocols (Standard)					
Relay Outputs	Two digital inputs, four configurable alarm relays and two dedicated relays for major and minor alarms					
Battery Disconnect	LVD & Breaker	LVD (Internal) & Breaker				
Module LED's / Monitoring	Three status LED's / Inview X with 7" touchscreen					
Features						
Ethernet SNMP Interface	Ye	es				
Power Event Log	Event log captures up to 5000 events as FIFO					
Web-based Software (served from product)	Accessible locally or remotely					
Service Contract	Silver - Gold - Platinum					
Mechanical	1 cabinet including batteries	2 cabinets Power + Battery				
Height x Width x Depth	83.0 in x 23.6 in x 31.5 in	83.0 in x 47.24 in x 31.5 in				
Weight (with batteries)	1265 lbs 2520 lbs					
Agency Compliance						
UL/CSA	UL1778 (Fifth Edition), CS	A-C22.2 No. 107.3, UL924				
UL/CSA FCC	× 21	A-C22.2 No. 107.3, UL924 Class A				



• United States, Belgium, China, India, Luxembourg, Malaysia, Russia, United Kingdom, Australia & Germany

Table 1: UPS AC input utility ratings

Code	Models Maximum Ambient Temperature: 40° C	Number of modules	Rated Power		Voltage Nominal	Rated Current Nominal	Recommended Breaker
	UPS Product code	Pces	kVA	KW	Vac	(A)	(A)
А	NxtGn-UPS-000-048-100-3-100-048-048-208	45 + 3*	123.75	101.25	3 x 120/208	318.8	450
В	NxtGn-UPS-000-048-100-3-080-039-039-208	36 + 3*	99.00	81.00	3 x 120/208	255.0	350
С	NxtGn-UPS-000-048-100-3-060-030-030-208	27 + 3*	74.25	60.75	3 x 120/208	191.3	250
D	NxtGn-UPS-000-048-100-2-067-032-032-240	30 + 2*	82.50	67.50	2 x 120/240**	318.8	450
One Cabinet System							
E	NxtGn-UPS-000-024-050-3-047-024-024-208	21 + 3*	57.75	47.25	3 x 120/208	148.8	200
F	NxtGn-UPS-000-024-050-2-030-016-016-240	14 + 2*	38.50	31.50	2 x 120/240**	148.8	200
G	NxtGn-UPS-000-024-050-1-030-016-016-120	15 + 1*	41.25	33.75	120	318.8	450

Table 2: UPS AC output ratings

Code	Models Maximum Ambient Temperature: 40° C	Number of modules	Rated Power		Voltage Nominal	Rated Current Nominal	Recommended Breaker
	UPS Product code	Pces	kVA	ĸw	Vac	(A)	(A)
А	NxtGn-UPS-000-048-100-3-100-048-048-208	45 + 3*	123.75	101.25	3 x 120/208	343.8	450
В	NxtGn-UPS-000-048-100-3-080-039-039-208	36 + 3*	99.00	81.00	3 x 120/208	275.0	350
C	NxtGn-UPS-000-048-100-3-060-030-030-208	27 + 3*	74.25	60.75	3 x 120/208	206.3	250
D	NxtGn-UPS-000-048-100-2-067-032-032-240	30 + 2*	82.50	67.50	2 x 120/240**	343.8	450
One Cabinet System							
E	NxtGn-UPS-000-024-050-3-047-024-024-208	21 + 3*	57.75	47.25	3 x 120/208	160.4	200
F	NxtGn-UPS-000-024-050-2-030-016-016-240	14 + 2*	38.50	31.50	2 x 120/240**	160.4	200
G	NxtGn-UPS-000-024-050-1-030-016-016-120	15 + 1*	41.25	33.75	120	343.8	450

* Extra module for N+1 redundancy

** or 120/208 by setting

NextGen UPS UL924 System - Datasheet - v1.0 Specifications can change without notice. New data will be updated on our website: <u>www.cet-america.com</u>. The present equipment is protected by several international patents, trademarks and copyrights.

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