Catalog
UPS

2025

AEC

www.aecups.com

UPS Online | Series LUMINA

Power capacity: 1-3 kVA

LUMINA single-phase UPS are AEC's double conversion online UPS Series with **Lithium LiFePO4 Batteries** in a Rack 19" format with powers starting from 1kVA up to 3kVA.
The UPS LUMINA series adopts the most innovative IGBT technologies with three level, ensuring efficiency up to 96% and a unitary output power factor.

The UPS are available in models 1kVA - 2kVA - 2.2kVA - 3kVA LUMINA UPS are single phase 110/120V input and output configuration with auto-sensing frequency 50/60Hz.

Description

Discover the LUMINA UPS (1–3 kVA)—a sleek 2U rack-mount unit delivering exceptional backup performance thanks to cutting-edge **LiFePO$_4$ battery technology**. In this compact chassis, every model sustains a **full-load run time of 11 minutes**, while the standout 2.2 kVA variant extends that to 22 minutes at rated capacity—or an **impressive 46 minutes at 1kW**, setting a new benchmark for high-density lithium-powered UPS systems. The advanced battery chemistry not only delivers significantly longer runtimes but also supports deep cycles and fast recharge, fully recharging within approximately two hours.
Standard communications are RS-232, USB, and EPO, SNMP and dry-contact modules can be added for comprehensive remote monitoring and control.
Ideal for IT closets, data centers, and edge deployments, the LUMINA UPS combines longer runtime, rapid recovery, and compact efficiency.

UPS Uninterruptible Power Supply Rack 19"
Online double conversion **3 Level IGBT Technology**;

Output power factor = 0.9;

Rotating Colored LCD Display via touch buttons;

Lithium LiFePO4 internal Batteries;

10X Runtime Lithium vs VRLA;

12-15 Years battery lifespan based on 3000 cycles;

Ultra-high efficiency up to **92%**;

Extreme working temperature range up to 140°;

Multiple communications RS232+EPO+USB Standard;

Lumina 2.2kVA runtime 46 Minutes on 1kW load;

Features

TIER 1 UPS
Long backup time

Lithium LiFePo4
Batteries

2 Hours recharging
time

THREE LEVEL 3 UPS

LiFePo4

WARRANTY 5 YEARS

24h/7 ASSISTANCE

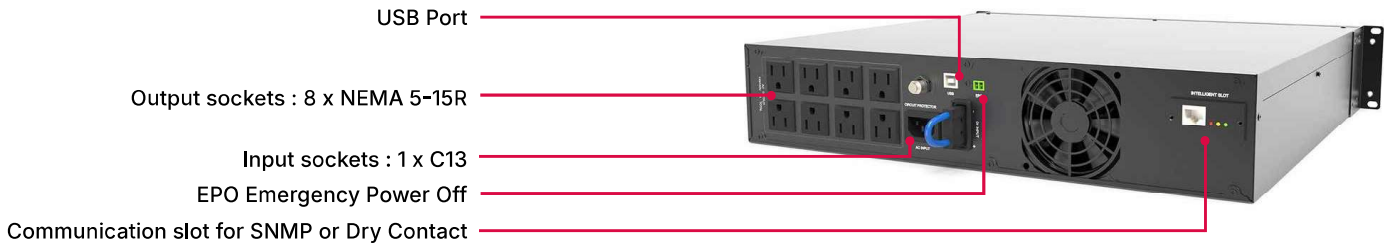
Scan the QR code to find out more informations on LUMINA UPS!

Longest runtime autonomy with Lithium

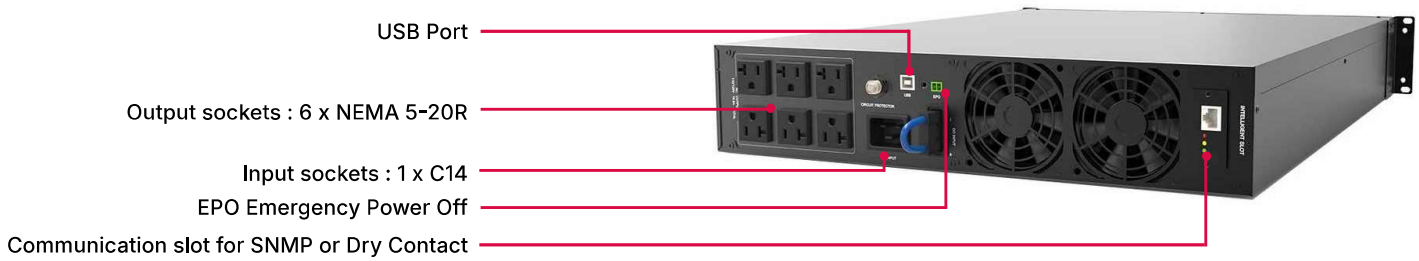
UPS LUMINA Autonomy backup runtime chart		
Load level	50%	100%
Lumina 1kVA	27 Minutes	11 Minutes
Lumina 2kVA	27 Minutes	11 Minutes
Lumina 2.2kVA	**46 Minutes**	**23 Minutes**
Lumina 3kVA	27 Minutes	11 Minutes

Details

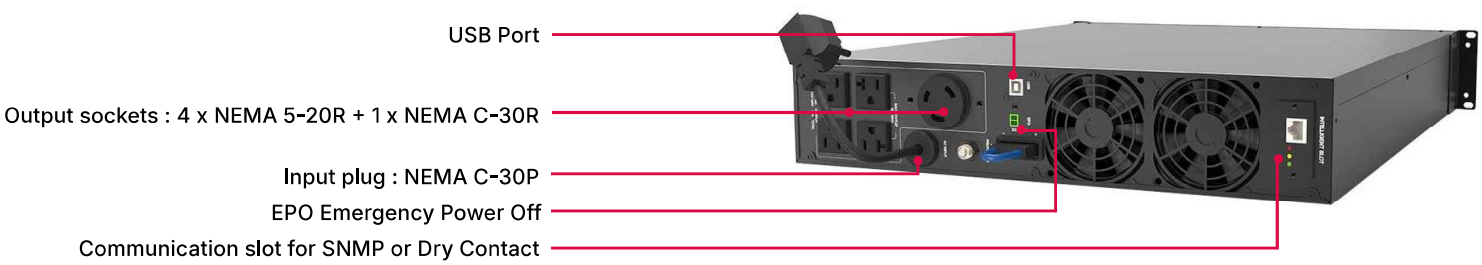
LUMINA 1kVA



LUMINA 2kVA - 2.2kVA



LUMINA 3kVA



Lithium LiFePO4 technology

$LiFePO_4$ (lithium iron phosphate) batteries offer unmatched safety and longevity. They resist thermal runaway, operate reliably across wide temperatures, and last over 3,000–5,000 cycles (15 years) with minimal capacity drop. Non-toxic and cobalt-free, they deliver efficient, stable power—ideal for mission-critical UPS systems.

$LiFePO_4$ batteries are lighter, longer-lasting, faster-charging, and safer than VRLA, offering higher energy density and lower maintenance:

10X Longer runtime: Lithium ($LiFePO_4$) offers up to 10× more runtime with the same physical size.

10X Discharging cycles: With over 3000 discharging cycles, Lithium batteries provides a 10X VRLA capabilities.

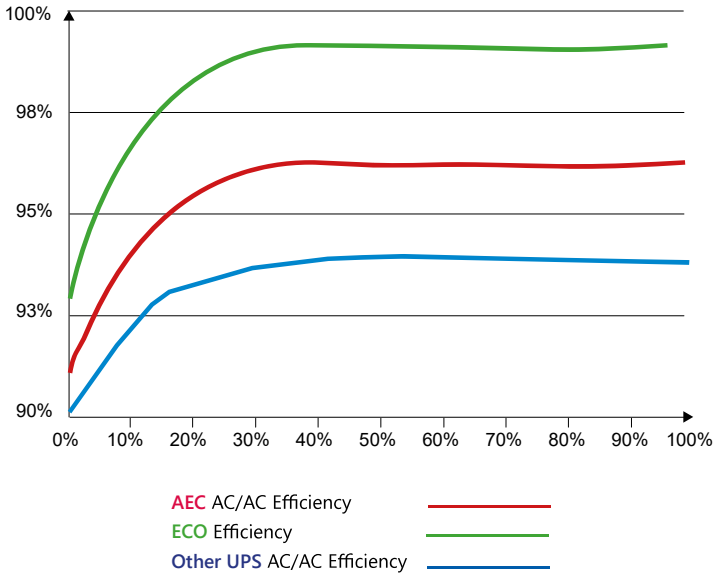
15 Years Lifespan: UPS with Lithium batterie boasts a 15-year lifespan, compared to VRLA's typical 3–5 years.

140° Working Tolerance: performs reliably across extreme temperatures, unlike VRLA which needs strictly controlled environments.

60% Lighter: Thanks to higher energy density and lighter chemistry, UPS with Lithium batteries are significantly lighter, more portable and easier to handle.

Fully recharged in 2 Hours: recharges in about 2 hours, much faster than VRLA's 8–10+ hour recharge time.

Safer and more reliable: $LiFePO_4$ is highly resistant to thermal runaway—even under overheating, short-circuit, or physical damage, it will not explode or catch fire. LFP technology is significantly safer than other lithium chemistries.



Standards and certifications

Scan the QR code to download the User Manual LUMINA 1-3kVA!

Technical specifications

MODELS	LUM1000RT-2U-LI	LUM2000RT-2U-LI	LUM2200RT-2U-LI	LUM3000RT-2U-LI
Input				
Voltage (VAC)	55-150Vac			
Frequency (HZ)	40~70Hz			
Input range (VAC)	100% load@>90Vac 70% load@>70VAC 40% load@>50VAC			
Power factory	≥0.99			
THDI	≤3%			
Socket or Plug	Socket C13	Socket C14	Socket C14	Cable NEMA C-30P
Output				
Power capacity (W)	900	1800	1980	2700
Power factor	0.9			
Voltage (VAC)	100/110/115/120Vac			
Frequency (HZ)	50/60±0.1			
THD	≤1%THD, linear load; ≤5%THD, non-linear load			
Waveform	Pure sinewave			
AC/AC Efficency	92%			
Overload	102%~110%: 10mins, 111%~130%:1mins,131%~150%: 30 seconds			
Socket - Plug	6 x NEMA 5-15R	8 x NEMA 5-20R	8 x NEMA 5-20R	6xNEMA5-20R + 1xNEMA5-30R
Battery				
Voltage (VDC)	24Vdc	48Vdc	72Vdc	72Vdc
Standard internal battery	10.6Ah	10.6Ah	13.6Ah	10.6Ah
Max. current Charger (A)	Max 4A			
Lifespan	12 - 15 Years			
Other specifications				
Recharging time	0-100% within 2 hours			
Communications	Standard: RS232, E.P.O Contact and USB Port Optional: SNMP, Modbus, Dry contact			
Noise (DB)	<50dB			
Temperature (°F - °C)	-20°C~50°C -4°F~122°C			
Umidity	<95%			
Dimensions (W*D*H) in	17.2*16.8*3.4(2U) in	17.2*22.6*3.4(2U) in	17.2*24.4*3.4(2U) in	17.2*22.6*3.4(2U) in
Dimensions (W*D*H) cm	43.7*42.7*8.6(2U)	43.7*57.4*8.6(2U)	43.7*61.9*3.4(2U)	43.7*57.4*8.6(2U)
Weight (Lb - Kg)	29 Lb - 13 Kg	44 Lb - 20 Kg	60 Lb - 27.2 Kg	55 Lb - 25 Kg
Certifications				
Standards	UL 1778, ETL, CSA, UN38.3			

All information is for reference only, subject to change by AEC at any time, and does not constitute contractual obligations.

AEC Italy

Via Nerviano, 55
20045 Lainate (MI), Italia
+39 02 94158991

AEC USA

2175 NW 115th Ave, Doral
FL 33172 USA
+1 786 553-4533

CONTACTS

ups.aecups.com
IT info@aecups.com
US sales@aecups.com