

Catalog UPS ETHERNO

2026



www.aecups.com

UPS Online | Series ETHERNO

Three-phase 208V



Power capacity: 10-30 kVA

The **ETHERNO three-phase UPS (10 to 30 kVA)** is AEC's three-phase online range: double-conversion tower UPS in the **10 kVA, 20 kVA and 30 kVA** ratings. The ETHERNO series adopts the most innovative 3-level IGBT technology, ensuring efficiency up to 94% and a unity output power factor.

The ETHERNO series incorporates state-of-the-art features for reliable and continuous power protection of critical electronic equipment. Its standout features include internal, **hot-swappable lithium battery modules**. Typical applications are server rooms, edge data centers, medical imaging and industrial lines on a 208 V three-phase supply, where a compact tower with long-life lithium batteries reduces maintenance to a minimum.

Description

The **AEC ETHERNO series UPS (10 to 30 kVA)** is a next-generation three-phase UPS built for demanding 208 V applications. Its state-of-the-art 3-level IGBT inverter delivers up to **94% AC-AC efficiency**, ensuring lower energy losses and minimal heat output.

With a **unity output power factor (PF = 1)** it provides full active power, maximizing capacity and performance for every connected load.

Every ETHERNO unit features advanced **internal lithium LiFePO4 batteries, with longer life, rapid recharge and superior reliability compared with VRLA systems. A smart battery management system (BMS) continuously monitors battery health for enhanced safety and performance.**

The **large color touchscreen** gives intuitive, real-time access to the system status and configuration. Built-in RS-485, dry-contact and EPO ports come as standard.

3 Phase 208V **3 Level IGBT Technology**;

Unity output power factor $PF \approx 1$ **kVA=kW**;

Hot-swappable Lithium 50 Ah Modules;

4.3" touchscreen color display;

Cold start, self-cleaning and other smart functions

Input-Output 3 Phase 208/208V;

Ultra-high efficiency up to **94%**;

Modbus and dry contact standard communications;

Fully customizable by display;

12-15 Years life span LiFePO4 internal modules.

Features



Hot-Swap Lithium



12-15 Year Life



UL9540 Certified



Self-Cleaning



4.3" Touchscreen



208V 3-Phase



Up to 140°F



94% Efficiency



5-Year Warranty

Scan the QR code to find out more information on ETHERNO UPS!

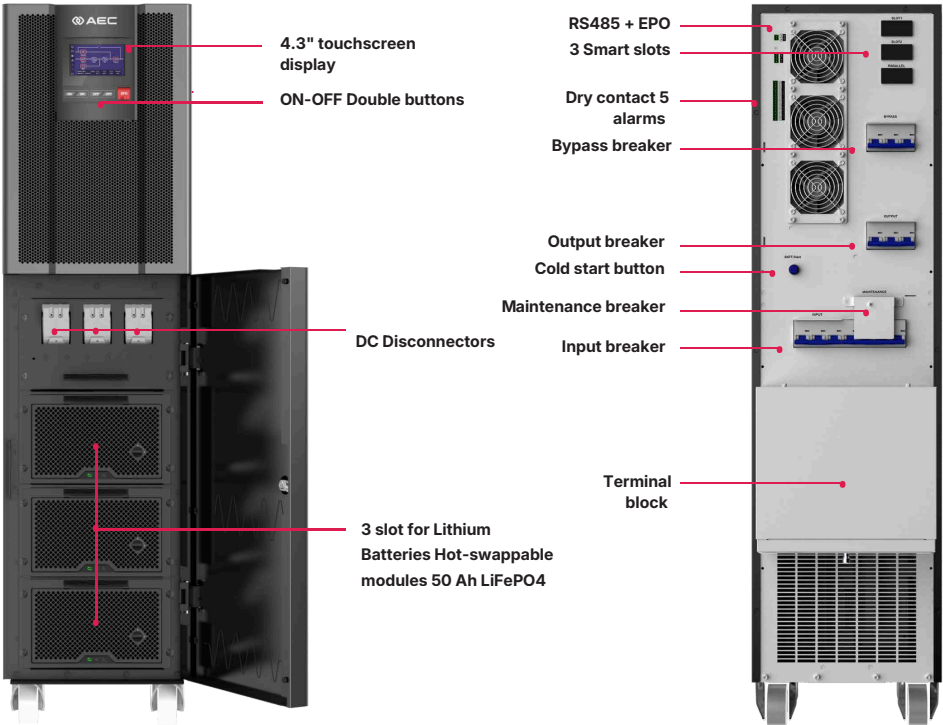


3-phase UPS, hot-swap Lithium modules

Three-phase 208V

UPS ETHERNO backup runtime chart		
Load level	50%	100%
Etherno 10 kW 1 x Lith Bat	27 Minutes	14 Minutes
Etherno 10 kW 2 x Lith Bat	55 Minutes	27 Minutes
Etherno 10 kW 3 x Lith Bat	82 Minutes	41 Minutes
Etherno 20 kW 2 x Lith Bat	27 Minutes	14 Minutes
Etherno 20 kW 3 x Lith Bat	41 Minutes	20 Minutes
Etherno 30 kW 3 x Lith Bat	27 Minutes	14 Minutes

Details

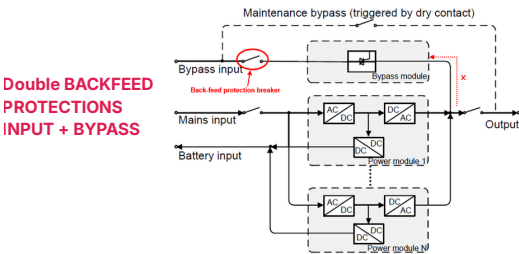


ETHERNO 10-20-30 kVA

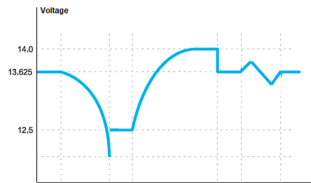
Advanced functions

Smart charge scheme — equalized charge, float charge and temperature compensation are managed intelligently to prolong battery life, with up to 40 A of charging current..

Bypass back-feed protection — blocks voltage feeding back under an abnormal failure, removing the shock risk during upstream maintenance.



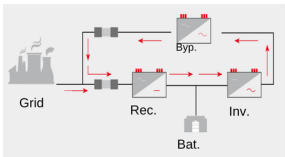
3 Stage smart charge function



Self-load test

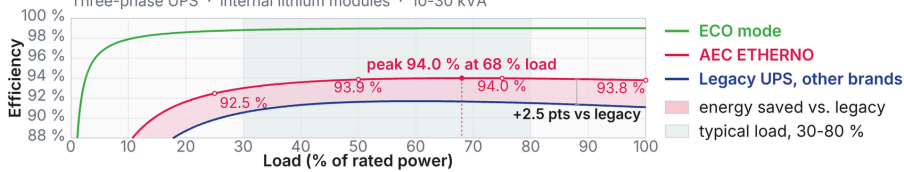
The UPS tests itself at full power without a rented load bank, drawing only about 2.7% of rated power.

Self-load diagram



ETHERNO Efficiency Curve

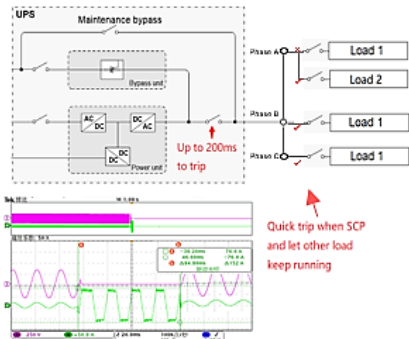
Three-phase UPS · internal lithium modules · 10-30 kVA



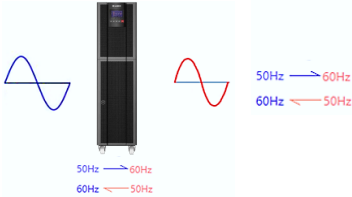
AC/AC efficiency, normal mode, nominal input, resistive load. Modelled from the declared efficiency (three-term UPS loss model). Y axis is zoomed to the working range; below roughly 11 % load the curve falls away steeply, as it does on every UPS. Indicative values - see the technical specification.

Short-circuit and anti-corrosion PCB

Short-circuit protection — output trip time is settable from 20 ms to 200 ms, guaranteeing the faulty load is disconnected.



Frequency converter mode — supports loads running on a different utility frequency, and the battery-not-connected warning can be disabled.



Smart Display

Clear display — a 4.3" color touchscreen provides an easy and intuitive way to control the UPS.

Secure access — three access levels (user, technician, manufacturer) protect the system settings.

Full configuration — input, output, battery, communication, language and operating modes can all be adjusted directly from the screen.

Live monitoring — real-time data such as voltage, load, frequency and battery status, cell by cell, at a glance.

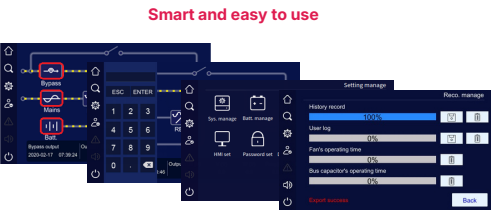
Event history — the UPS logs up to 10,000 events, downloadable through the built-in USB port.

Generator ready — advanced settings ensure stable operation and communication with diesel generators.

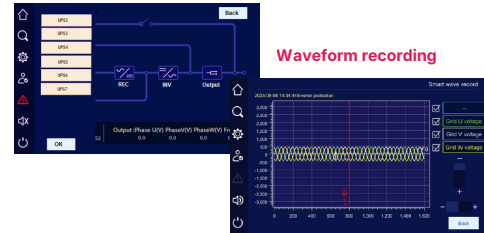
Custom alarms — dry-contact alarms are set and managed right from the touchscreen.

Self-cleaning — automatic fan cycles remove dust and keep the internal parts clean.

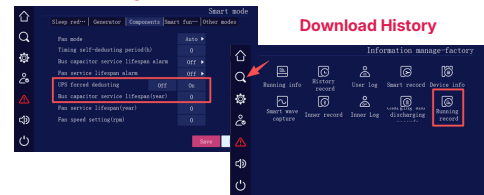
Waveform display — the system periodically records inverter, rectifier and control waveforms for diagnostics.



Integrated display parallel systems



Self-cleaning function



4.3" touchscreen · LED indicator · EPO button

LiFePO4 Lithium technology

10× longer runtime — lithium (LiFePO4) offers up to ten times the runtime of VRLA in the same physical size.

12-15 years of life — a UPS with lithium batteries lasts 12 to 15 years, compared with the typical 3 to 5 years of VRLA, in normal operation.

140°F working tolerance — it performs reliably across extreme temperatures, unlike VRLA, which needs a strictly controlled environment.

60% lighter — thanks to the higher energy density and lighter chemistry, a UPS with lithium batteries is much lighter, more portable and easier to handle.

Fully recharged in 2 hours — it recharges in about two hours, much faster than the 8 to 10 hours or more needed by VRLA.

Safer and more reliable — LiFePO4 is highly resistant to thermal runaway: even when overheated, short-circuited or physically damaged it will not explode or catch fire. This makes it far safer than other lithium chemistries.



Standards and certifications



Scan the QR code to download the User Manual ETHERNO 10-30 kVA!



ETHERNO 10-30 kVA

Three-phase 208V

MODELS	ETH10-nX50A-LI		ETH20-nX50A-LI	ETH30-3X50A-LI
Input				
Voltage (VAC)	208/220 VAC			
Frequency (Hz)	40-70 Hz			
Input range (VAC)	120V-156V linear derating, 156V-268V at full load			
Power factor	≥0.99			
THDi	≤3%			
Phase	3W+N+G			
Connection	Terminal block			
Output				
Power capacity (kW)	10	20	30	
Power factor	1			
Voltage (VAC)	190/200/208±1%(L-L) ±1%			
Frequency (Hz)	50/60±0.1			
THD	≤1% THD, linear load; ≤4% THD, non-linear load			
Waveform	Pure sine wave			
AC/AC Efficiency	94%, ECO mode > 99%			
Overload	<105% continuous · 105-110% 60 min · 110-130% load for 10 min · 130-150% load for 1 min · 150-200% load for 200 ms			
Connection	Terminal block			
Battery				
Voltage (VDC)	240 VDC			
Lithium LFP Module Ah	50Ah (81.6 lb/37 kg) — module ETH-50-LI			
Number of internal LFP	n = 1-3 (ETH10 frame)	n = 2-3 (ETH20 frame)	3 (ETH30 frame)	
Max. current Charger (A)	2-40 settable (default is 20)			
Lifespan	12 - 15 Years			
Other specifications				
Recharging time	< 2 Hours			
Communications	RS485+EPO+Dry contact (1 input, 5 output)+2 slots (SNMP and Parallel Optional)			
Noise (dB)	<65 dB			
Temperature (°F - °C)	32°F - 104°F · 0°C - 40°C			
Humidity	<95%			
Dimensions (W x D x H) in	12.6 x 39.1 x 49.2 in			
Dimensions (W x D x H) cm	32 x 99 x 125 cm			
Weight (lb - kg) w/o batt	247 lb - 112 kg			
Certifications				
Standards	UL 1778, Performance: IEC 62040-3, UL 9540 for LFP Module			
Price-list codes and net weights: ETH10-1X50A-LI 328 lb · ETH10-2X50A-LI and ETH20-2X50A-LI 410 lb · ETH10-3X50A-LI, ETH20-3X50A-LI and ETH30-3X50A-LI 492 lb. Frames without modules ETH10, ETH20, ETH30 247 lb; lithium module ETH-50-LI 81.6 lb.				

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



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