

Catalog UPS AUREON

2026



www.aecups.com

UPS Online | Series AUREON

Three-phase 208V



Power capacity: 10-30 kVA

The **AUREON 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 AUREON series adopts the most innovative **3-level IGBT technology**, ensuring **efficiency up to 94%** and a **unity output power factor**.

The AUREON series incorporates state-of-the-art features for reliable and continuous power protection of critical electronic equipment. Its standout features include high-capacity internal, **hot-swappable VRLA 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 proven VRLA batteries and hot-swappable modules is the preferred choice.

Description

The **AEC AUREON 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 AUREON unit features advanced **internal hot-swappable VRLA batteries, with a maximum internal capacity of 80 batteries of 12 V / 9 Ah**. The four battery modules can be replaced without shutting down the load, for safe and fast maintenance.

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 $PF=1$ **kVA=kW**;

Hot-swappable VRLA Batteries;

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;

Waveform recording on display.

Features



Tier 1 UPS



High-Rate VRLA



Hot-Swap Trays



208V 3-Phase



3-Level IGBT



Unity PF kVA=kW



94% Efficiency



3-Year Warranty



24/7 Support

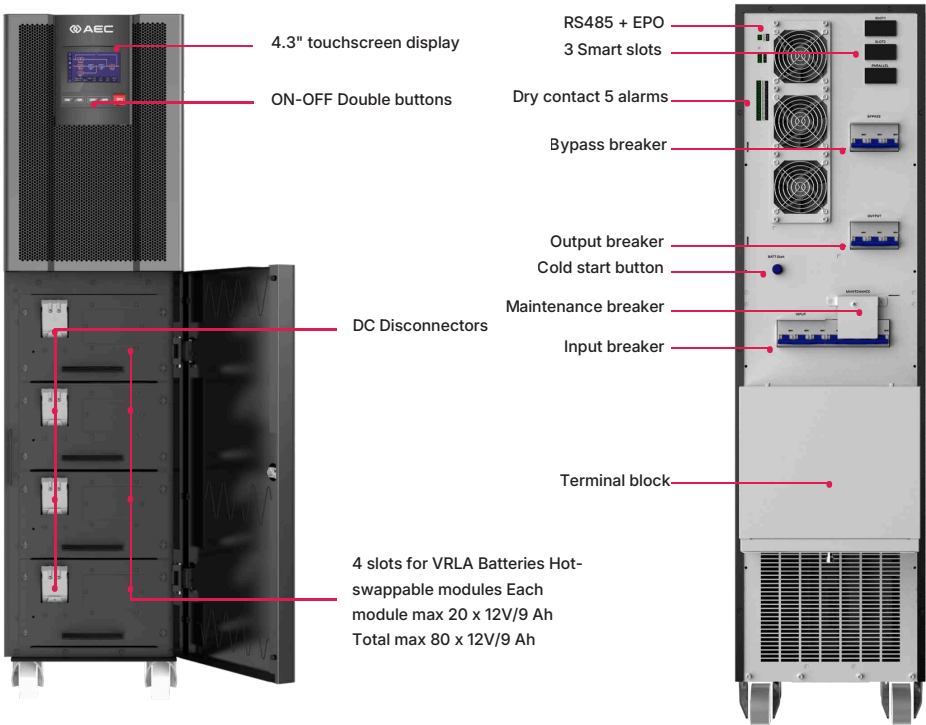
Scan the QR code to find out more information on AUREON UPS!



3-phase UPS, hot-swap VRLA batteries

UPS AUREON backup runtime chart		
Load level	50%	100%
Aureon 10 kW 40x9Ah	25 Minutes	7 Minutes
Aureon 10 kW 60x9Ah	40 Minutes	18 Minutes
Aureon 10 kW 80x9Ah	60 Minutes	20 Minutes
Aureon 20 kW 60x9Ah	18 Minutes	5 Minutes
Aureon 20 kW 80x9Ah	32 Minutes	10 Minutes
Aureon 30 kW 80x9Ah	14 Minutes	4 Minutes

Details

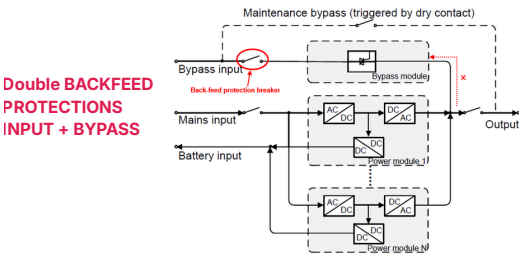


AUREON 10-20-30 kVA

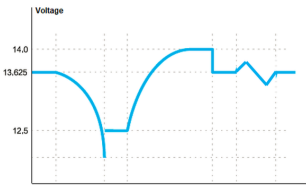
Advanced functions

Smart charge scheme — equalized charge, float charge and temperature compensation are managed intelligently to prolong battery life, with up to 20 A of charging current.

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



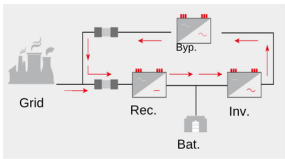
3 Stage smart charge function



Self-load test

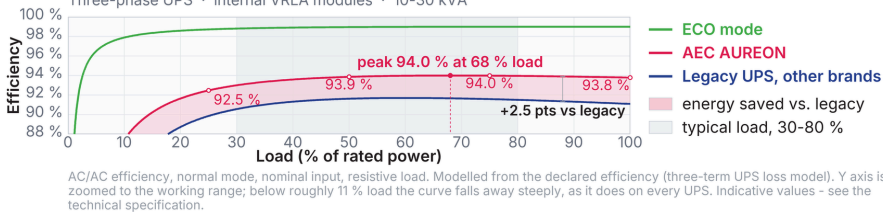
The UPS tests itself at full power without a rented load bank, drawing only about 2.7% of rated power.

Self-load diagram



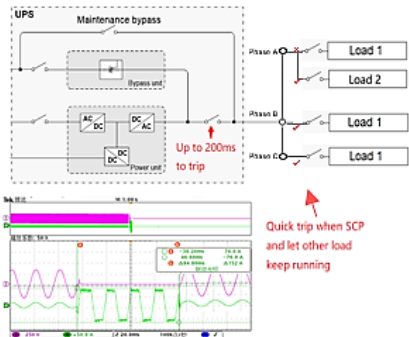
AUREON Efficiency Curve

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

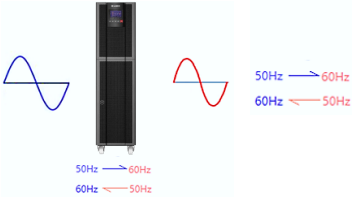


Short-circuit and anti-corrosion PCB

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.



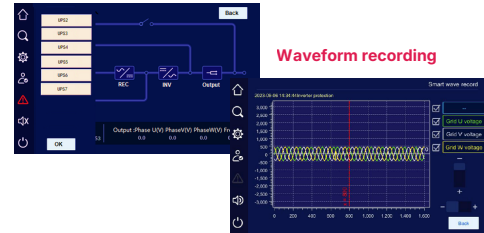
Smart Display

- 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.



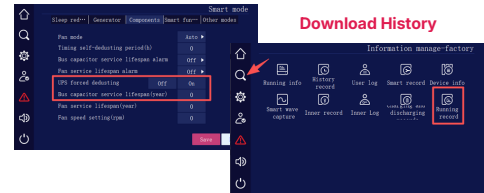
Smart and easy to use

Integrated display parallel systems



Waveform recording

Self-cleaning function



Download History



4.3" touchscreen · LED indicator · EPO button

Three level IGBT technology

- A 3-level IGBT inverter** introduces an intermediate voltage state (0 V), giving three discrete levels: +Vdc, 0 V, and -Vdc. This small enhancement dramatically improves performance:
- Cleaner waveform** — the staircase-shaped output follows the sine wave more closely, reducing THD and interference.
- Lower harmonic distortion (THD)** — the 3-level IGBT reduces THD compared with the rough waveform of a 2-level inverter, improving power quality and reducing harmonic pollution.
- Lower electromagnetic interference** — smaller voltage steps mean less high-frequency noise radiated and conducted to nearby equipment.

- Lower switching stress** — smaller voltage transitions mean that each IGBT experiences less stress and lower switching losses, which allows the use of faster, lower-voltage devices.
- Higher efficiency** — with reduced losses, less heat dissipation and better waveform quality, efficiency rises to 94%, especially in the new, demanding critical power applications.

Standards and certifications



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



AUREON 10-30 kVA

Three-phase 208V

MODELS	AUR10-40/80X9A		AUR20-60/80X9A	AUR30-80X9A
Input				
Voltage (VAC)	208/220 VAC			
Frequency (Hz)	40-70 Hz			
Input range (VAC)	120-156 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			
VRLA Slots	4 hot-swappable slots			
Battery per slot	20 pcs 12V/9Ah per slot, max 80 pcs — 10 kVA: 40 or 80 · 20 kVA: 60 or 80 · 30 kVA: 80 pcs			
Max. current Charger (A)	2-20 settable (default is 10)			
Other specifications				
Recharging time	< 6 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	14.9 x 39.1 x 49.2 in			
Dimensions (W x D x H) cm	38 x 99 x 125 cm			
Weight (lb - kg) w/o batt	231 lb - 105 kg	258 lb - 117 kg	282 lb - 128 kg	
Certifications				
Standards	UL 1778, Performance: IEC 62040-3			
Price-list codes: AUR10-40X9A, AUR10-80X9A, AUR20-60X9A, AUR20-80X9A, AUR30-80X9A (internal batteries included); frames without batteries AUR-10, AUR-20, AUR-30. Battery 12V / 9Ah: CSB-9AH.				

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



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