

Catalog UPS CIRRO-IB

2026



www.aecups.com

UPS Online | Series CIRRO-IB



Power capacity: 30-150 kVA

The **AEC CIRRO-IB (internal batteries model)** series UPS (**30 to 150 kVA**) is a modular three-phase solution with internal hot-swappable battery trays, designed for maximum flexibility, efficiency and resilience. Built on a **scalable N+X** architecture, the system takes **hot-swappable 30 kW power modules in a compact 150 kVA frame, together with up to 240 internal 12V/9Ah batteries**, ideal for growing power demands without system downtime.

Its modularity ensures redundancy and fault tolerance, reducing the risk of critical failures and simplifying maintenance. With high-efficiency online double conversion and **unity power factor (PF = 1)**, the CIRRO-IB series delivers clean, reliable power while minimizing energy losses.

Description

The AEC CIRRO-IB series UPS (30–150 kVA) is a modular three-phase system for 480 V installations with internal hot-swappable battery trays. Its **three-level IGBT** inverter delivers up to **96% AC-AC efficiency**, with a unity output power factor (PF = 1) so every kVA becomes usable kilowatts.

The **150 kVA frame supports up to five hot-swappable 30 kVA power modules**, enabling flexible **N+1 or N+N** redundancy for enhanced reliability and service continuity. Designed for compact power and backup, the unit integrates **internal VRLA storage in 24 dedicated trays holding up to 240 x 12 V / 9 Ah batteries** in the same enclosure. Each tray is individually hot-swappable, so maintenance never interrupts the load.

A fully programmable **7" touchscreen** gives technicians complete access to the operating parameters, system setup and advanced diagnostics.

Communication is streamlined with built-in RS-232, USB and dry-contact interfaces; optional SNMP and parallel kits let the system grow with the business.

Modular technology N+X;

Unity output power factor PF=1 **kVA=kW**;

Three level IGBT Technology;

Internal hot-swappable VRLA upto 240 pcs 12V/9 Ah;

7" touchscreen color display;

Input-Output 480V;

Ultra-high efficiency up to **96%**;

Hot-swappable power module 30 kVA;

Multiple communications RS-232+EPO+USB Standard;

Parallel up to 8 units.

Features



Modular N+X



High-Rate VRLA



7" Touchscreen



480V 3Ph 4-Wire



3-Level IGBT



Unity PF kVA=kW



96% Efficiency



3-Year Warranty



24/7 Support

Scan the QR code to find out more information on CIRRO-IB UPS!



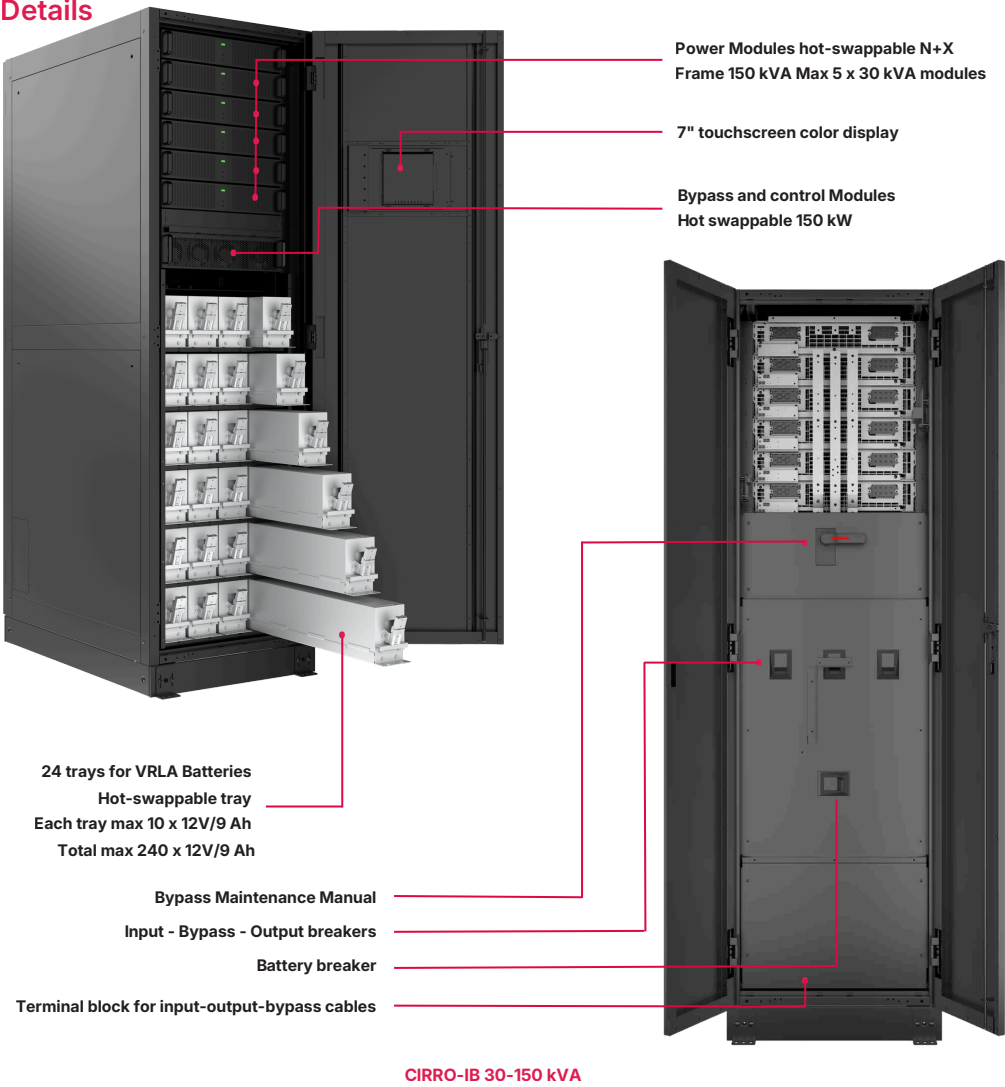
Modular N+X with internal VRLA batteries

Modular UPS technology transforms power protection by delivering unmatched scalability, flexibility and ease of maintenance in a compact, high-performance system. In the 150 kVA frame up to 5 independent 30 kVA power modules can be installed, each hot-swappable and fully operational without a system shutdown, unlike traditional fixed systems.

This architecture supports flexible redundancy configurations such as N+1 or N+N. For example, a 90 kW load can be protected by 4 × 30 kVA modules (N=3, X=1), with one module acting as backup in case of failure or maintenance, so that operation is never interrupted.

In addition, the system features 24 internal battery trays, each holding 10 VRLA batteries, with room for up to 240 hot-swappable 12 V / 9 Ah batteries.

Details



Smart Display

Clear display — a 7" 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.

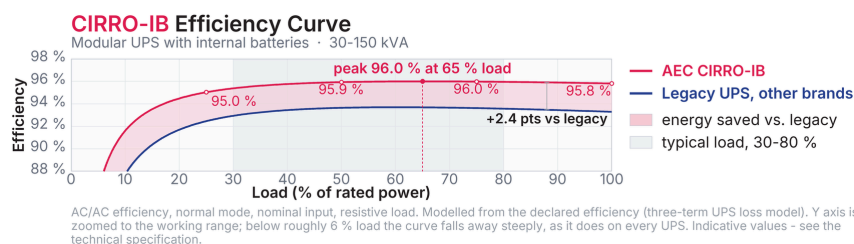
Custom alarms — dry-contact alarms are set and managed right from the touchscreen.

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.



7" touchscreen



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 96%, especially in the new, demanding critical power applications.

Standards and certifications



Scan the QR code to download the User Manual CIRRO-IB 30-150 kVA!



CIRRO-IB 30-150 kVA

MODELS	CIRIB150-1X30 ... 5X30
Input	
Voltage (VAC)	480 VAC (L-L)
Frequency (Hz)	40-70 Hz
Input range (VAC)	384-528 VAC(L-L)@full load, 288-384 VAC (L-L) power derate from 100% to 75%
Power factor	≥0.99
THDi	≤3%
Phase	3W+N+G
Output	
Power Module (kW)	30 kVA
Frame capacity (kW)	150 kVA (Max 5 Modules x 30 kVA)
Power factor	1
Voltage (VAC)	480 VAC (L-L)
Frequency (Hz)	50/60±0.1
THD	≤1% THD, linear load; ≤5% THD, non-linear load
Waveform	Pure sine wave
AC/AC Efficiency	96%
Overload	110% 1 hour · 125% 10 min · 150% 1 min · >150% 200ms
Battery	
Voltage (VDC)	±240 VDC
Standard internal battery	Max 24 hot-swappable trays (CIRIB-BATTR-10x9A; empty tray CIRIB-BATTR-EMPTY), each tray 10 pcs 12V/9Ah, total 240 pcs
Max. current Charger (A)	40A settable
Other specifications	
Recharging time	< 6 Hours
Communications	Standard: USB, RS-232, RS485, Dry contact 5 alarms Optional: SNMP, Modbus, Dry contact 12 alarms
Noise (dB)	<65 dB
Temperature (°F - °C)	32°F - 104°F · 0°C - 40°C
Humidity	<95%
Dimensions (W x D x H) in	23.6 x 39.3 x 78.7
Dimensions (W x D x H) cm	60 x 100 x 200 cm
Frame Weight (lb - kg)	616 lb - 279 kg (CIRIB-FRAME)
Power module (lb - kg)	52 lb - 23.6 kg (CIRIB-PWR-30)
Certifications	
Standards	CE (IEC EN 62040-1; EMC IEC EN 62040-2; IEC EN 62040-3); UL 1778
Price-list codes (frame + modules + 24 trays x 10 batteries): CIRIB150-1X30 30 kVA · CIRIB150-2X30 60 kVA · CIRIB150-3X30 90 kVA · CIRIB150-4X30 120 kVA · CIRIB150-5X30 150 kVA; frame CIRIB-FRAME; power module CIRIB-PWR-30; battery trays CIRIB-BATTR-10x9A (with 10 x CSB-9AH, 56 lb - 25.4 kg) and CIRIB-BATTR-EMPTY (5 lb - 2.3 kg).	

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



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