



AEC ITALY CATALOG

2023





UPS SERIES IST 9



1:1

3:1

3:3

Power from 10kVA up to 20kVA



kW = kVA

97%
Efficiency

UPS RACK 19" ONLINE THREE-PHASE OR SINGLE PHASE

The **IST9 Rack UPS** (10-20kVA) are AEC's range of single-phase and three-phase online rack UPS, with powers starting from 10kVA up to 20kVA. The UPS IST9 series adopts the most innovative **3-level IGBT** technologies, ensuring efficiency up to 97% and a unitary output power factor.

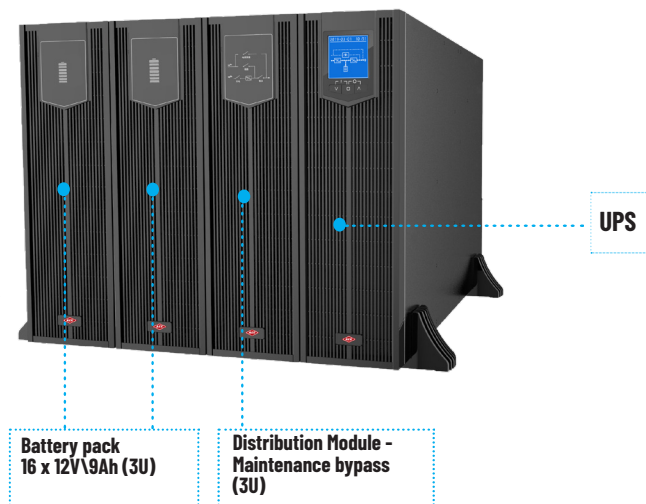
IST9 can be configured in **1 \ 1 or 3 \ 1 or 3 \ 3** input \ output mode directly from the display. 19 "rack UPS compact in size, only 3U in rack cabinet height. The UPS includes a **distribution module** and a manual **bypass disconnect** to facilitate maintenance.

UPS RACK 19" THREE-PHASE

PRINCIPAL FEATURES

EFFICIENCY AND FLEXIBILITY

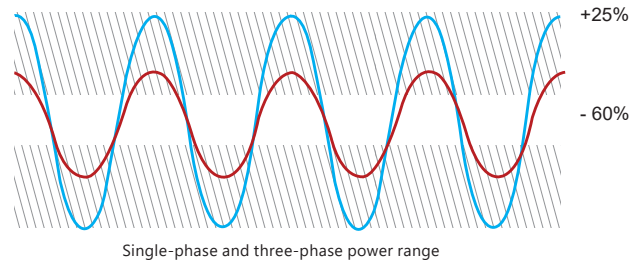
- Output power factor equal to 1 for a better load capacity at the same power with lower and more convenient initial investment costs;
- Very high AC \ AC efficiency up to 97%;
- Innovative three-level IGBT technology integrated in the inverter section;
- Continuous overload up to 115%;
- Ultra-wide range of batteries, from 12 up to 20 monoblocks;



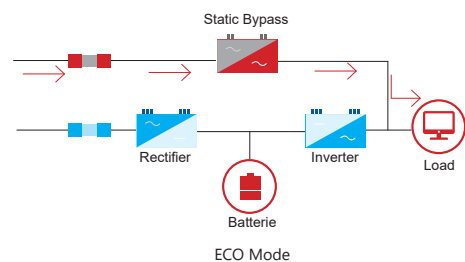
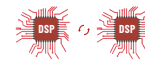
MULTIPLE CONFIGURATIONS

- Large rotary HD screen, graphic interface and simplified display, for an improved and user-friendly user experience;
- UPS input and output configurable from display in single-phase and \ or three-phase (1: 1,3: 1,3: 3);
- ECO, Normal or Parallel N + 1 mode configurable from on-site display;
- Configuration for input, output, bypass, batteries, communications, language and operating modes via display;

- Extremely flexible input adaptable to all needs, tolerance range -60% ~ + 25%;



- Small footprint with small size only 3U;
- Advanced control with double redundant DSP;
- Fully tropicalized electronic cards;
- Charging current for batteries from 1 to 10 A, configurable from the display;
- Shared batteries for parallel systems, a single battery pack for two N + 1 UPSs;
- ECO mode with efficiency up to 99%, configurable from the display;



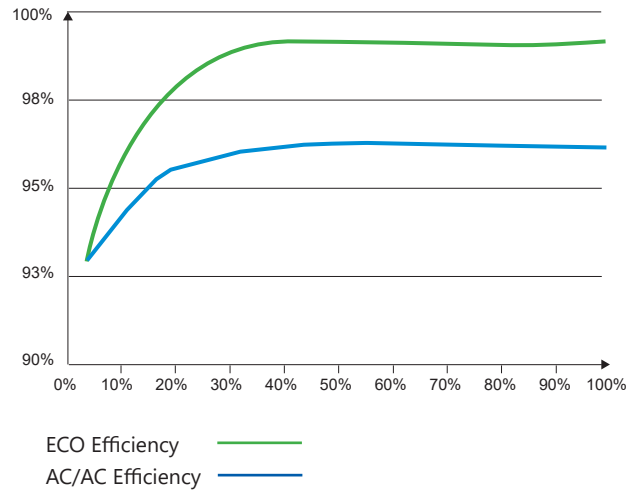
- Battery configurations minimum 24 up to 40 per series ($\pm 144 \sim \pm 240\text{Vdc}$) via display;
- Possibility of parallel installation (redundant or power) up to 4 units;
- Display available in 7 languages.

EXCELLENT PERFORMANCE

- Efficiency higher than 93% even at low loads;
- Maximum output tolerance, ability to operate with 100% unbalanced loads;
- Maximum power density, 20kW of capacity take up only 3U of size;
- Access to the menu via different password levels, input-output-battery configuration directly from display;
- Intelligent fans with high efficiency cooling, multiple modes to control their speed, extend their life and improve their efficiency.

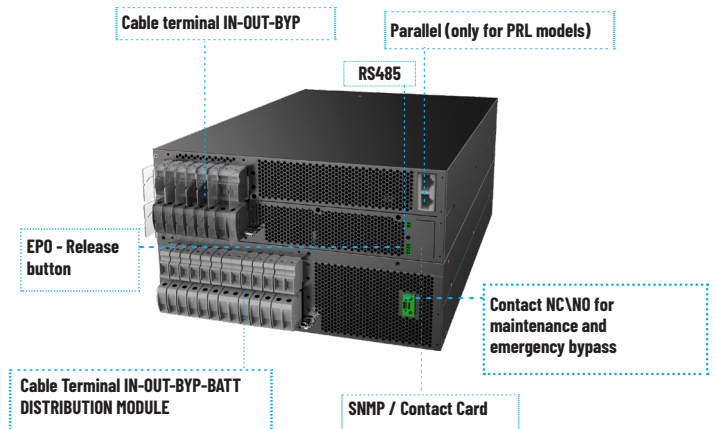


Automatic fan control



STANDARD AND COMMUNICATIONS

- Rack module for electrical distribution with switches for Input, Static Bypass, Output and Maintenance Bypass;
- RS485 communication port with integrated Modbus;
- EPO, emergency release button;
- Kit for 1: 1 and/or 3: 1 installation (optional);



- Support for installation in tower \ floor version;
- USB communication port equipped with user manual, cable and CD for software;
- SNMP network card for remote control and monitoring (optional);
- NC \ NO dry contact card for alarms (optional).

TECHNICAL SPECIFICATIONS			
MODELS	IST9-10	IST9-15	IST9-20
INPUT			
VOLTAGE (VAC)	80-280 (L-N) o 138-485 (L-L)		
FREQUENCY (HZ)	40-70		
POWER FACTOR	≥0.99		
THDI	<3%		
OUTPUT			
POWER (KVA)	10	15	20
MAX. AC/AC EFFICIENCY	97,00%		
POWER FACTOR	1		
VOLTAGE (VAC)	220/230/240±1% (L-N) o 380/400/415±1% (L-L)(configurable)		
FREQUENCY (HZ)	50/60±0.1		
THD	THD <2% (linear loads), THD < 4% (non-linear loads)		
SWITCHING TIME (MS)	0		
ECO MODE	Yes		
OVERLOAD	115%~130% Overload for 15mins, 130%~150% Overload for 1min, more than 150% Overload for 200ms		
BATTERIES			
VOLTAGE (VDC)	±192 (±144~±240 configurable)		
MAX. CHARGING CURRENT (A)	4 (1-10 configurable)		
OTHER SPECIFICATIONS			
COMMUNICATIONS	RS485+EP0 (RS232+ Clean contact card, SNMP optional)		
DISPLAY	LCD		
ALARMS	Low batteries, Anormal input, Overload, Block/Fault ecc.		
PROTECTION	Low batteries, Overload, Short-circuit, Over-temperature ecc.		
NOISE (DB)	< 55		
TEMPERATURE (°C)	-5~40		
HUMIDITY	0 ~ 95%		
DIMENSIONS (L×W×H) MM	UPS	438×500×130(3U)	
	Distribution Box	438×500×130(3U)	
WEIGHT (KG)	UPS	20	
	Distribution Box	8	
CERTIFICATIONS			
STANDARDS	CE (Reference standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2; Classification IEC EN 62040-3)		

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