



UPS SERIES IST 6



3:3

Power from 30kVA to 1.2MVA



kW = kVA

97%
Efficiency

MODULAR UPS HOT-SWAPPABLE

The **IST6 modular UPS** (30-1200kVA) are AEC's range of three-phase modular UPS, UPS with **hot-swappable modules**, in powers starting from 30kVA up to 1200kVA in single structure. The UPS IST6 series adopts a completely modular technology, guaranteeing **constant redundancy** of the continuity system.

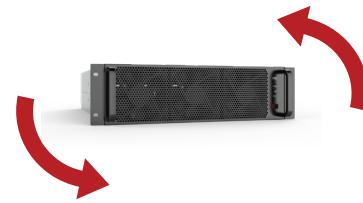
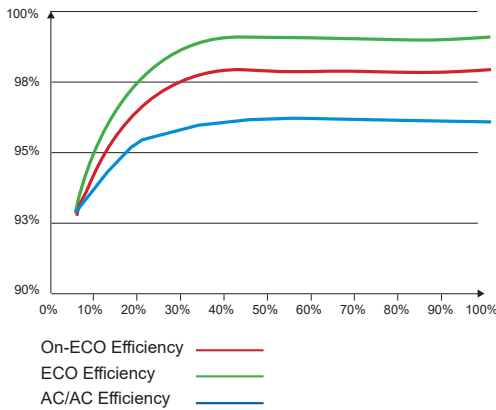
Their modularity allows future expansion in power up to 4.8MW. They are available in **four sizes**, up to 120kVA | 200kVA - 300kVA | 600kVA- 800kVA | 1000kVA-1200kVA | with an efficiency of up to 97% and maximum safety. IST6 is designed for **medium and large data centers**. UPS configurable directly from the display, with great flexibility and high overload capacity. The self-cleaning function reduces the risk of dust accumulation on the cards. The system includes the **free contact card** for alarms.

UPS MODULAR

PRINCIPAL FEATURES

MODULAR TECHNOLOGY HOT-SWAPPABLE

- Output power factor equal to 1;
- Maximum AC \ AC efficiency up to 97%
ECO-Mode up to 99%
Online ECO-Mode up to 98%;

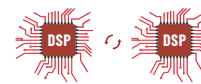


MAXIMUM SCALABILITY

- Innovative modular N + 1 technology in all components of the UPS system;
- Expandable and hot potential directly on site and from the display;
- Possibility of installation in a single structure up to 1200kW with 12 modules of 100kW;
- Possibility of parallel installation (redundant or power) up to 5MW;
- Batteries in common for systems in parallel, a single battery pack for two UPS N + 1;



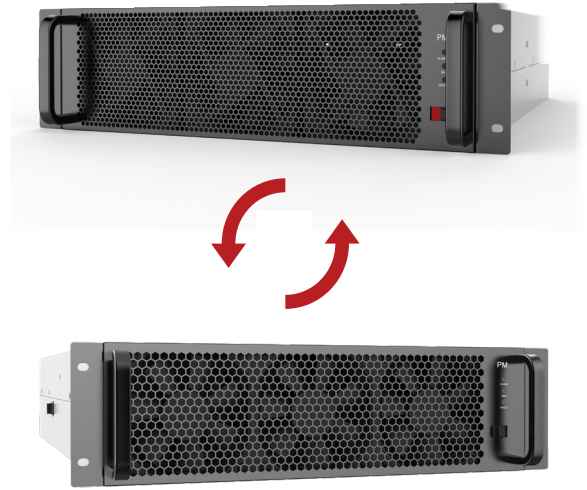
- Battery configurations: from 15 to 20 monoblocks ($\pm 180 \sim \pm 240Vdc$);
- ECO mode with efficiency up to 99%, configurable from the display;
- Advanced control with double redundant DSP;
- Completely tropicalized electronic cards;
- Display available in 7 languages;
- Intelligent fans with high efficiency cooling, multiple modes to control their speed, extend their life and improve their efficiency.



Automatic fan control

REDUNDANT AND HOT-SWAPPABLE POWER MODULES

- Hot-swappable N + 1 UPS module with power of 30kW for structure up to 120kW;
- Hot-swappable N + 1 UPS module with power of 50kW for structures with maximum expansion up to 200kW, 300kW and 600kW;
- Hot-swappable N + 1 UPS module with 100kW power for structures with maximum expansion up to 800kW, 1000kW and 1200kW;
- UPS module including rectifier and inverter with 3-level IGBT technology and redundant components;
- Redundant modules in power and in parallel N + 1 for maximum reliability and versatility;
- Intelligent saving modes with modules automatically activated periodically only in case of energy need.



STRONG, FLEXIBLE AND FUTURE EXPANDABLE STRUCTURES

120kW

200-300kW

600-800kW

1000-1200kW

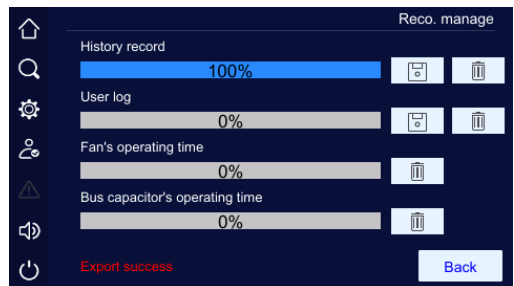
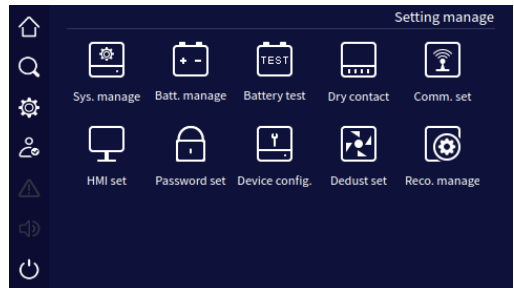
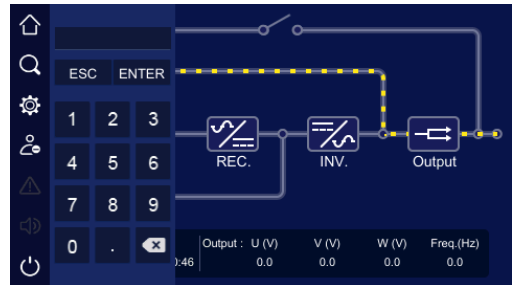
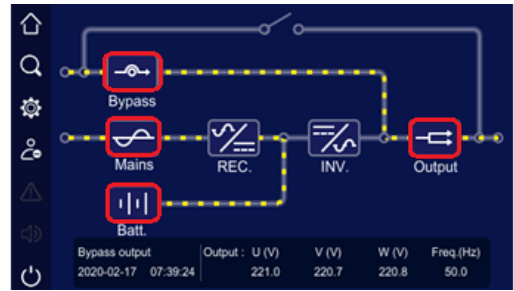


SETTINGS FROM DISPLAY

- Access to the menu via different password levels (User, Technician and Manufacturer);
- Configuration for input, output, bypass, batteries, communications, language and operating modes;
- Periodic self-cleaning function, to expel impurities and reduce the risk of breakdowns;
- Large memory up to 10,000 events downloadable via the USB port integrated in the UPS;
- Advanced communication for installation and operation with diesel generators;
- Alarms from clean contact card, configurable from display;

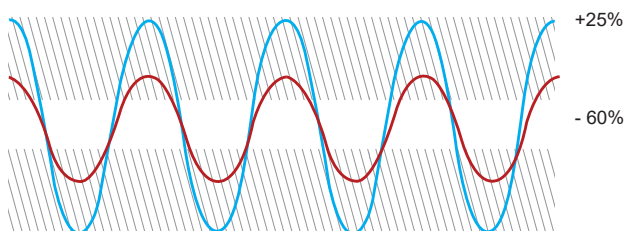


Display 4.9" Inches



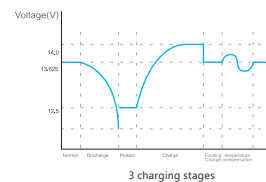
EXCELLENT PERFORMANCE

- Efficiency higher than 95% even at low loads;
- Maximum output tolerance, ability to operate with 100% unbalanced loads;
- Double input with wide tolerance, compatible with diesel generators;



Three-phase power supply range

- Advanced 3-stage battery charging and maintenance system;



- Redundant and hot extractable power modules (rectifier and inverter);
- Centralized bypass module with battery start button;

FREQUENCY CONVERTER

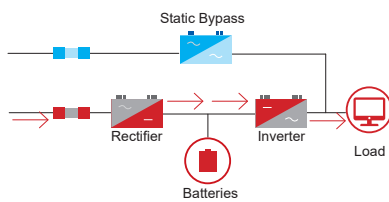
- 50Hz-60Hz or 60Hz-50Hz converter mode;
- Possibility of disabling the static bypass and the DC power supply of the inverter.



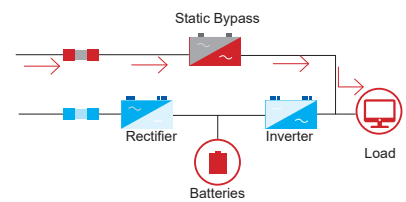
AEC APP FOR MOBILE

- Download the AEC UPS Italy APP and start monitoring and controlling your Modular UPS wherever you are, directly from your smartphone thanks to the AEC SNMP API communication card;
- Possibility of integration with BMS and remote monitoring and control systems of Data-Centers and technological structures with Modbus protocol and API.

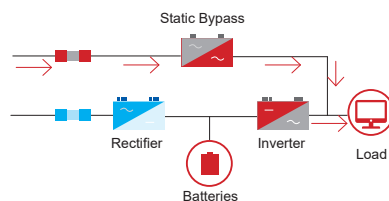
OPERATING MODES



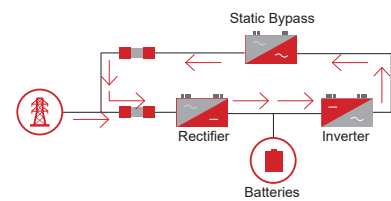
Online Double Conversion



ECO Mode



OnLine-ECO Mode



Self-loading test Mode

STANDARD AND COMMUNICATIONS

- Clean contact card with 5 alarms;
- Bypass switch for maintenance;
- EPO emergency release button on the front, remote clean contact on the back;
- Starting from battery by means of a specific button;
- Integrated RS485 and Modbus communication port;
- Protection against reverse polarity of the batteries;
- SNMP network card for remote control and monitoring (optional);
- NC \ NO dry contact card for further 12 alarms (optional).

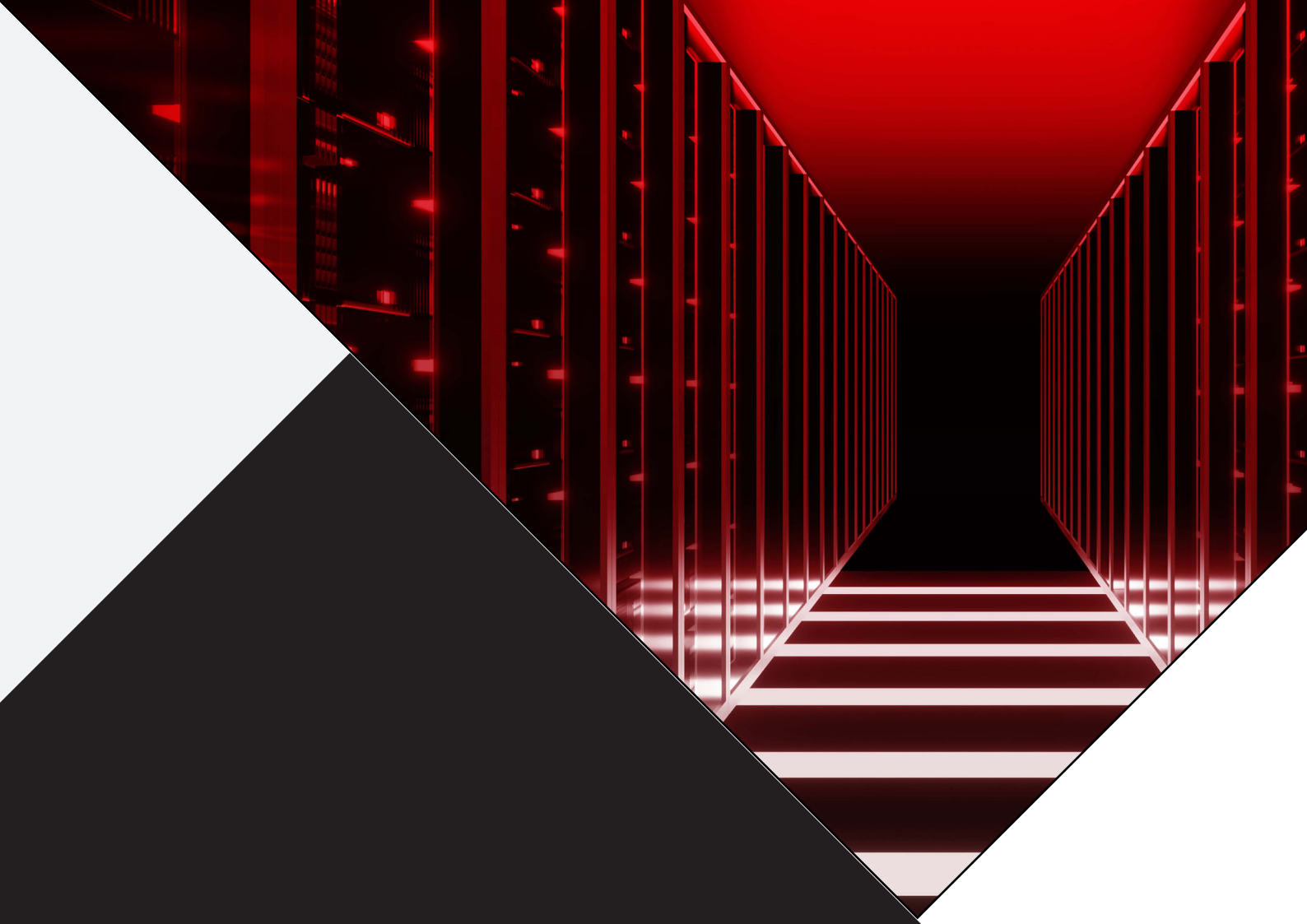
TECHNICAL SPECIFICATIONS

MODELS	IST6-120	IST6-200 IST6-300	IST6-600
POWER MODULES	IST6-30-J	IST6-50-J	
INPUT			
VOLTAGE (VAC)	380/400/415		
TENSION TOLERANCES (VAC)	L:L 138~485		
FREQUENCY INPUT (HZ)	40-70		
BYPASS TENSION (VAC)	-15% (-20%/-30% optional) ~+15%(+10% /+20% optional)		
POWER FACTOR	≥0.99		
THDI	<5% (Non-linear at full load)		
PHASES	3+N+PE		
BATTERIES (VDC)	±192 (±180~ ±276 settable)		
CHARGING CURRENT (A)	N×10 Maximum (N: number of power modules)		
OUTPUT			
POWER (KVA)	120	300	600
POWER FACTOR	1		
PHASES	3+N+PE		
WAVEFORM	Sinusoidal		
TENSION (VAC)	L-L:380,400,415 ±1%		
FREQUENCY (HZ)	50/60± 0.2%		
DIFFERENCE 3 PHASES	≤2 degrees		
THD	≤1% (Linear loads at full load), ≤4% (Non-Linear loads at full load)		
MAX. SYSTEM EFFICIENCY	over 97%		
PARALLEL	N+1 redundant		
OVERLOAD	105-115% Overload for 60mins, 116%-130% Overload for 10mins, 131%-150% Overload for 1 min, more than 150% Load transfers on Bypass		
OTHER SPECIFICATIONS			
TEMPERATURE (°C)	0~40		
HUMIDITY	0%~95%		
COMMUNICATION	RS485, MODBUS, Free Contact Card (SNMP optional)		
NOISE (DB)	< 65	<70	
POWER MODULE (KVA)	30	50	
WEIGHT POWER MODULE (KG)	32	33	
DIMENSIONS (L×W×H) (MM)	600×860×2000		1200×860×2000
WEIGHT (KG)	UPS	180	224
	Bypass Module	17	25
	Power Module 30/50kW	27	33
CERTIFICATIONS			
STANDARDS AND CERTIFICATIONS	CE (Reference standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2; Classification IEC EN 62040-3)		

ALL INFORMATION IS INDICATIVE, MAY BE MODIFIED BY AEC AT ANY TIME AND DOES NOT CONSTITUTE CONTRACTUAL OBLIGATIONS.

TECHNICAL SPECIFICATIONS

MODELS		IST6-800	IST6-1000	IST6-1200
POWER MODULES		IST6-100-J		
INPUT				
VOLTAGE (VAC)	380/400/415			
VOLTAGE TOLERANCES (VAC)	L:L 138~485			
FREQUENCY INPUT (HZ)	40-70			
BYPASS VOLTAGE (VAC)	-15% (-20%/-30% optional) ~+15%(+10% /+20% optional)			
POWER FACTOR	≥0.99			
THDI	<5% (Non-linear at full load)			
PHASES	3+N+PE			
BATTERIES (VDC)	±240 (±180~ ±276 settable)			
CHARGING CURRENT (A)	N×10 Maximum (N: number of power modules)			
OUTPUT				
POWER (KVA)	800	1000	1200	
POWER FACTOR	1			
PHASES	3+N+PE			
WAVEFORM	Sinusoidal			
VOLTAGE (VAC)	L-L:380,400,415 ±1%			
FREQUENCY (HZ)	50/60± 0.2%			
DIFFERENCE 3 PHASES	≤2 degrees			
THD	≤1% (linear loads at full load), ≤4% (non-linear loads at full load)			
MAX. SYSTEM EFFICIENCY	over 97%			
PARALLEL	N+1 redundant			
OVERLOAD	105-115% Overload for 60mins, 116%-130% Overload for 10mins, 131%-150% Overload for 1 min, more than 150% Load transfers on Bypass			
OTHER SPECIFICATIONS				
TEMPERATURE (°C)	0~40			
HUMIDITY	0%~95%			
COMMUNICATION	RS485, MODBUS, Free contact card (SNMP optional)			
NOISE (DB)	<70			
POWER MODULE (KVA)	100			
POWER MODULE WEIGHT (KG)	33			
DIMENSIONS (L×W×H) (MM)	1400*1000*2000	1800*1000*2000		
WEIGHT (KG)	UPS	580	650	740
	Bypass Module	60	80	80
	Power Module 100kW	55		
CERTIFICATIONS				
STANDARDS	CE (Reference standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2; Classification IEC EN 62040-3)			



REDUNDANT MODULAR TECHNOLOGY ...

Thanks to the support of qualified and professional technicians, AEC is able to assist and guide its customers in choosing the most suitable solution for them.

Nowadays the use of data centers in the productive world is growing dramatically as they are of fundamental importance to support the continuous technological development of our planet. If until a few decades ago the interruption of the operation of a data center would not have caused great inconvenience, today we must always remain vigilant and ready to intervene in the event of system failure.

For this reason, UPS uninterruptible power supplies are an indispensable element for the correct and continuous operation of data centers and there are several factors to consider when evaluating the type of UPS to install.