



**We are  
behind the Power**

**UPS | Uninterruptible  
POWER SUPPLY**

**CATALOG**

**[WWW.AECUPS.COM](http://WWW.AECUPS.COM)**



# SERIES - IST7

**10-200 kVA**  
**UPS ONLINE**  
**DOUBLE CONVERSION**



kW = kVA

**96%**  
Efficiency



PF=  
**1.0**



**1:1**  
PHASE

**3:1**  
PHASE

**3:3**  
PHASE

### 3 Phase Online UPS (10-200kVA).

The IST7 series 3-Phase in, 3-Phase out UPS uses advanced 3 level inverter technology and digital technology for full interconnection and has advantages such high efficiency, high power density and occupies only a small amount of floor space. It provides safe, stable, clean, and environmentally friendly power to loads and can provide safe and reliable comprehensive protection to data centers, IT server rooms, precision instruments and others.

### APPLICATIONS



FINANCE



TELECOMMUNICATION



ENERGY



MEDICAL



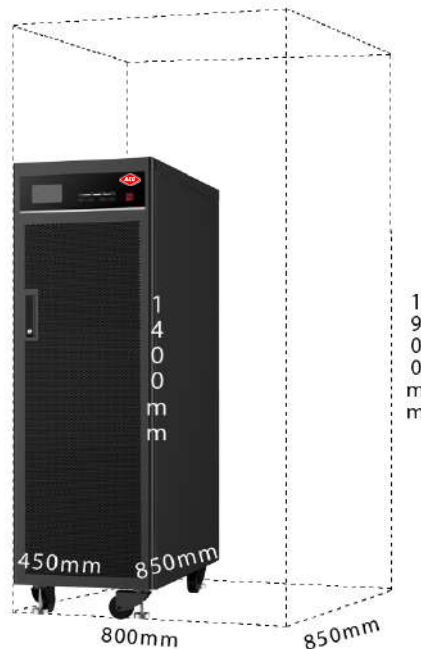
GOVERNMENT

- **3 LEVEL IGBT TECHNOLOGY UPS;**
- **MODULAR DESIGN;**
- **UPGRADABLE ON SITE (50-200kVA);**
- **96% EFFICIENCY;**
- **OUTPUT POWER FACTOR 1;**
- **FULLY SETTABLE FROM DISPLAY ON SITE;**
- **SELF-CLEANING FUNCTION;**
- **CAPTURE WAVE-FORM GRAPHICS ON DISPLAY (BLACK BOX);**
- **HOT-SWAPPABLE BATTERY PACKS.**



## ECO-ENERGY SPACE SAVER

High power density, 200kVA and occupies only 0.54 square meters of area; saves a lot of surface space in the client's server room while having an environmentally friendly design. It uses the latest 3 level IGBT rectifying technology and its input power factor approaches unit power factor and improves energy efficiency to up to 96%.

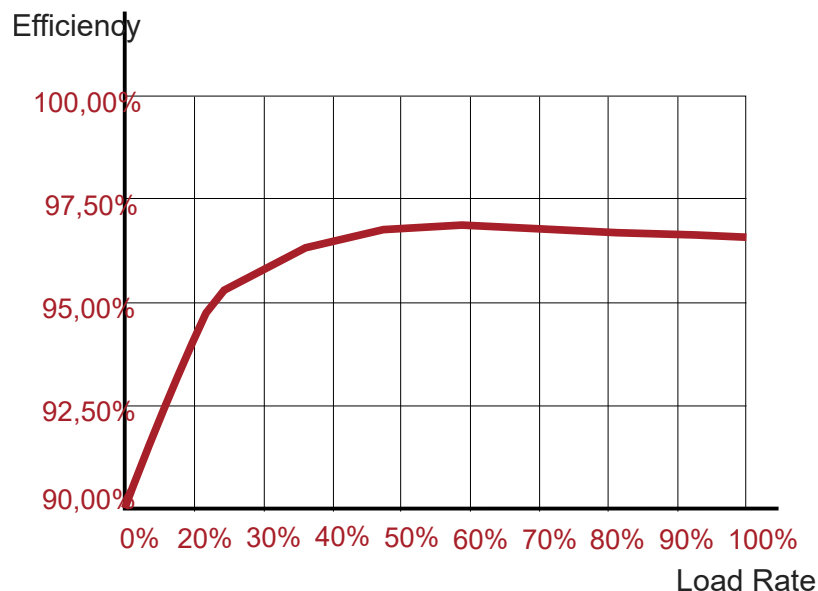


Compare to normal size in the market

## MAXIMUM POWER

 Full Power

The IST7 Series allow 100% three phase unbalanced load. With a power factor equal to 1, significant savings are made on energy consumption and equipment investments costs so cost effectiveness increases.



## **LOWER TOTAL COST**

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### **Lower total cost for management**

The system has a touch screen with powerful functions, dual button on/off switching, user-friendly interface, easy to operate protection functions and warning alarms. It also has complete input over voltage, input under voltage, over load, short circuit, and component failure warning to reduce client operation and maintenance costs and has smart waveform record for failure that can record key simulations and digital signals a few cycles before and after a fault occurs to make it much easier for equipment maintenance and troubleshooting. This effectively improves system maintenance time efficiency. The 4D fan design further improves overall system efficiency and makes operation and maintenance management more convenient and improves overall operation reliability.

Let's take an example on a 120kVA / 120kW AEC at full work load H24, comparing it with a competitor's UPS with standard efficiency 92%.

## **SAVINGS CHEAP**

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- Day saving energy:  
 $(120\text{kVA} \times 1.0 \times 96\% - 120\text{kVA} \times 0.8 \times 92\%) \times 24\text{h} = 645.12 \text{ kWh};$
- Day saving money:  
 $645.12 \times 0,1 \text{ Euro/kWh} = 64.512 \text{ Euro (hypothesis 0.1 Euro/kWh);}$
- Each year saving energy:  $645.12 \times 365 = 235468.8 \text{ kWh};$
- Each year saving money:  $0.1 \times 235468.8 =$

**23546.88 Euro.**



**€ 23.546,88 PER YEAR**

# SMARTER OPERATION

## Smarter Operation and Maintenance Management

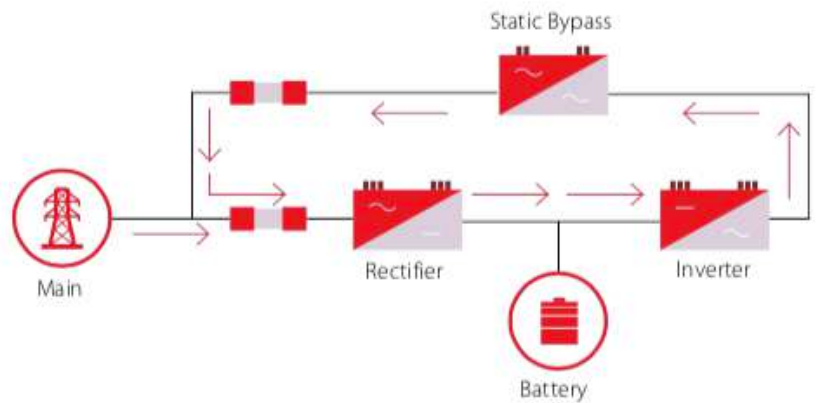
Modular design allow operations of maintenance and reparations to be quicker and safer.

Replacing Power Module of UPS IST7 has never been so easy and fast, in fact the average time to replace faulty component is less than 30 minutes, reducing all costs of reparations by 50%.

Full digital interconnection, advanced dual DSP control technology, fast fault self-diagnosis, full redundancy coverage, no more single point of failure, and good system compatibility ensures reliable power supply to the load from an ultra-wide range of input from the power grid, while the smart generator control enables flexible adaptation to various complex power grid environments.



Common battery bank sharing



Self-aging Test

# SELF-CLEANING FUNCTION

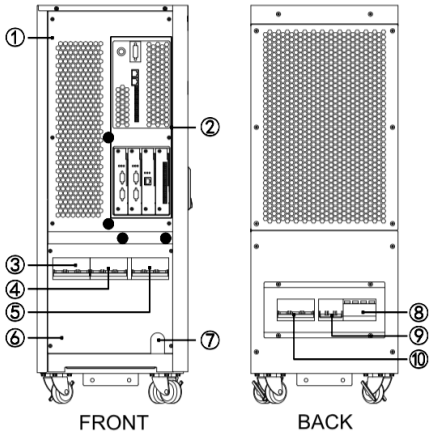
The new self de-dusting mode periodically blows all the dust out of the power module in order to reduce the risk of PCB failure due to dust corrosion by more than 30%.

Self de-dusting mode can be set daily, weekly or periodically at user's convenience.

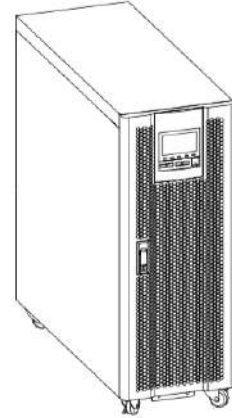


SELF DE-DUSTING MODE

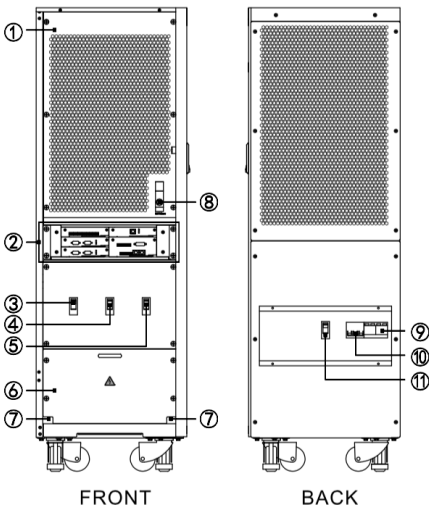
## IST7 10-40KVA



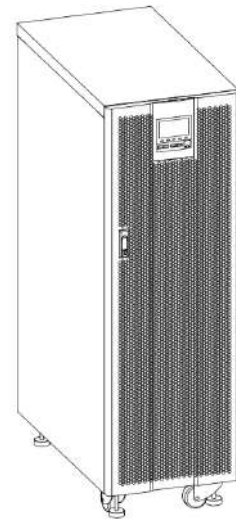
1. TOP COVER PLATE;
2. CONTROL UNIT;
3. POWER BREAKER;
4. BYPASS BREAKER;
5. OUTPUT BREAKER;
6. WIRING COVER PLATE;
7. WIRING HOLES OF COMMUNICATION WIRES;
8. SURGE PROTECTION DEVICE (OPTIONAL);
9. SURGE PROTECTION BREAKER (OPTIONAL);
10. MAINTENANCE BUPASS BREAKER.



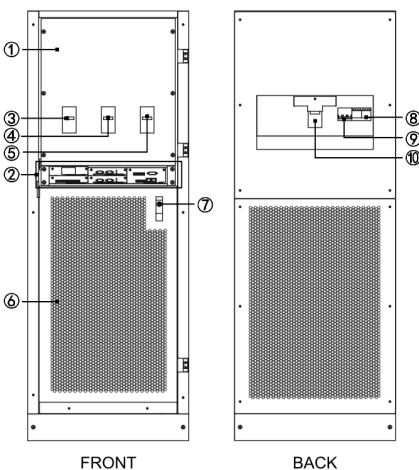
## IST7 50-120KVA



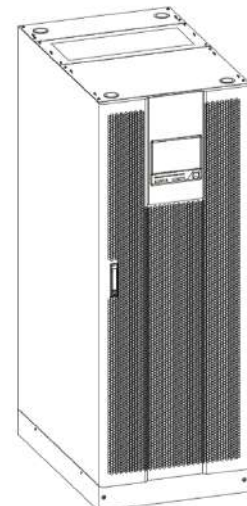
1. TOP COVER PLATE;
2. CONTROL UNIT;
3. POWER BREAKER;
4. BYPASS BREAKER;
5. OUTPUT BREAKER;
6. WIRING COVER PLATE;
7. WIRING HOLES OF COMMUNICATION WIRES;
8. BATTERY SLOW START BOTTON;
9. SURGE PROTECTION DEVICE (OPTIONAL);
10. SURGE PROTECTION BREAKER (OPTIONAL);
11. MAINTENANCE BUPASS BREAKER.



## IST7 160-200KVA



1. WIRING COVER PLATE;
2. CONTROL UNIT;
3. POWER BREAKER;
4. BYPASS BREAKER;
5. OUTPUT BREAKER;
6. BOTTOM COVER PLATE;
7. BOTTOM START BUTTON;
8. SURGE PROTECTION DEVICE (OPTIONAL);
9. SURGE PROTECTION BREAKER (OPTIONAL);
10. MAINTENANCE BUPASS BREAKER.



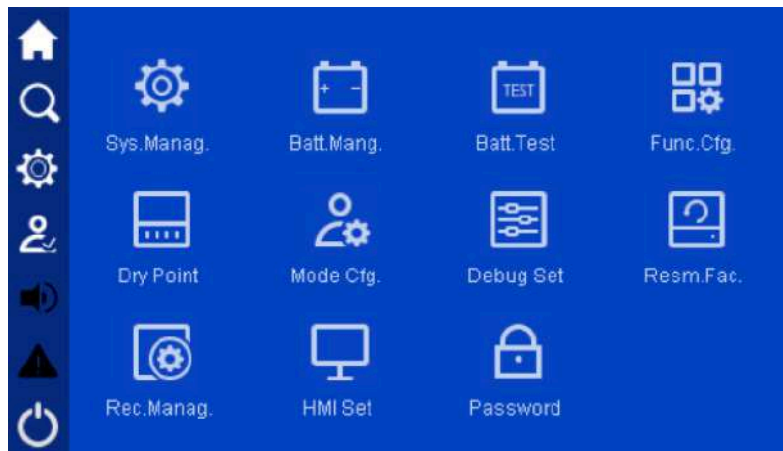


# DISPLAY SETTABLE

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## UPS 100% Fully settable from display on site

Thank to advanced computerized display, IST7 Series UPS is completely configurable from display directly on site without the need of PC or specialized software.



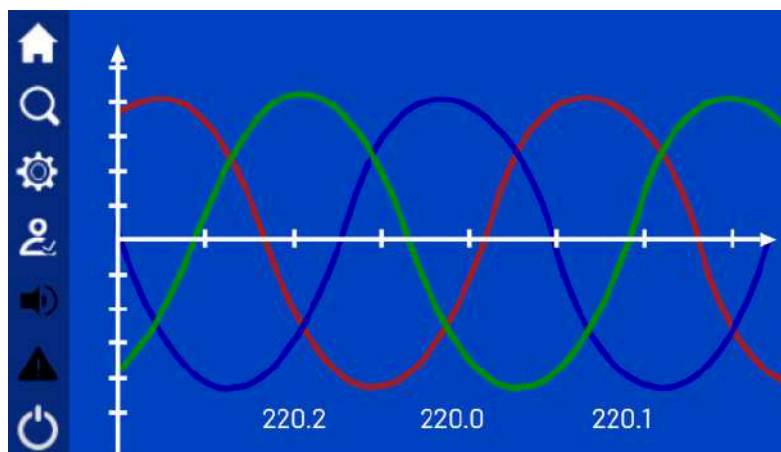
# BLACK BOX

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## Capture wave-form graphics on display (black box)

The operating system incorporated in the computerized display is able to analyze and record waveforms of each individual components of the UPS.

Through the computerized colored display it is possible to show waveforms of each phase, thus simplifying the localized identification of problems or distortions of any kind inside or outside the apparatus.



3 YEARS WARRANTY UPS



BEST PRODUCT  
3PHASE UPS 2019

## TECHNICAL SPECIFICATIONS

MODELS	IST7010 IST7010-L	IST7020 IST7020-L	IST7030 IST7030-L	IST7040 IST7040-L
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### INPUT

VOLTAGE (VAC)	80 - 280 (L-N) / 138-485 (L-L)			
FREQUENCY (HZ)	40~70			
BYPASS VOLTAGE (VAC)	380/400/415: -20%~+15%			
POWER FACTOR	≥0.99			
THDI	≤3%			
PHASE	3:3 / 3:1 / 1:1			

### OUTPUT

CAPACITY (KVA)	10	20	30	40
POWER FACTOR	1			
VOLTAGE (VAC)	L - N: 220/230/240±1% L - L: 380/400/415±1%			
FREQUENCY (HZ)	50/60±0.1			
UNBALANCE 3-PHASE VOLTAGE STABILIZATION WITH FULL LOAD	≤2%			
WAVEFORM	Pure sine wave, THD<1% at linear			
EFFICIENCY	up to 96%			
OVERLOAD	110% load for 60mins; 116%~130% load for 10mins; 155% load for 1min; >155% load for 200ms			

### BATTERY

BATTERY VOLTAGE (VDC)	±192 (±96~±240 settable) / ±192 (±144~±240 settable)			
BATT TYPE	16~40*9AH/12V	24~40*9AH/12V	48~80*9AH/12V	48~80*9AH/12V
CHARGING CURRENT (A)	1-10 / 1-20 (settable)			

### OTHERS

COMMUNICATION INTERFACE	RS485, MODBUS, dry contacts (RS232, SNMP, expand dry contact card are optional in slot)			
DISPLAY	Touch screen+LED			
ALARM	AC input abnormal, low battery, overload, failure			
PROTECTION	IP21, overload, over temperature, battery low voltage, output over/low voltage			
NOISE (DB)	<55			
WORKIN TEMPERATURE (°C)	-5~40			
RELATIVE HUMIDITY	0~95%, no condensation			
DIMENSION (W×D×H)(MM)	250x755x880		300x785x1250	
WEIGHT (KG)	143	143	240	



## TECHNICAL SPECIFICATIONS

MODELS	IST7050	IST7080	IST7100	IST7120	IST7160	IST7200
<b>INPUT</b>						
VOLTAGE (VAC)	380/400/415 (138~485 L-L)					
FREQUENCY (HZ)	40~70					
BYPASS VOLTAGE (VAC)	380/400/415: -20%~+15%					
POWER FACTOR	≥0.99					
THDI	≤3%					
PHASE	3 $\phi$ 4W+PE					
<b>OUTPUT</b>						
CAPACITY (KVA)	50	80	100	120	160	200
POWER FACTOR	1					
VOLTAGE (VAC)	L - N: 220/230/240±1% L - L: 380/400/415±1%					
FREQUENCY (HZ)	50/60±0.1 (battery mode)					
PHASE	3 $\phi$ 4W+PE					
UNBALANCE 3-PHASE VOLTAGE STABILIZATION WITH FULL LOAD	≤2%					
WAVEFORM	Pure sine wave, THD<1% at linear					
EFFICIENCY	up to 96%					
OVERLOAD	105%~115% load for 60mins; 116%~130% load for 10mins; 131%~150% load for 1min; >150% load for 200ms					
<b>BATTERIES</b>						
BATTERY VOLTAGE (VDC)	±192/±216 (±180/±204/±216/±228/±240 settable)					
BATT TYPE	External					
CHARGING CURRENT (A)	1-30			1-40		
<b>OTHERS</b>						
COMMUNICATION INTERFACE	RS485, MODBUS, dry contacts (RS232, SNMP, expend dry contact card are optional in slot)					
DISPLAY	Touch screen+LED					
ALARM	AC input abnormal, low battery, overload, failure					
PROTECTION	IP21, overload, over temperature, battery low voltage, output over/low voltage					
NOISE (DB)	<65					
WORKIN TEMPERATURE (°C)	0~40					
RELATIVE HUMIDITY	0~95%, no condensation					
DIMENSION (W*D*H)(MM)	450×840×1400			600×900×1600		
WEIGHT (KG)	180	210	242	320	350	

ALL INFORMATION CONTAINED IN THIS BROCHURE ARE PURELY INDICATIVE AND CANNOT BE USED TO FORM ANY CONTRACTUAL OBLIGATIONS. SPECIFICATIONS OR DESIGNS CAN BE CHANGED AT ANYTIME WITHOUT NOTICE.



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