























The AEC 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.

- Parallel up to 4 units
- Back up time up to 4 hours
- Hot swappable battery











FINANCE TELECOMMUNICATION



- Highefficiency, up to 95%
- kVA=kW, Output PF=1
- 3 level of technology IGBT Rectifier and Inverter
- Self-aging function
- Intelligent digital charging management, maximum charger current up to 12A
- Smaller and compact size with higher power density

## **Guaranteed Protection**

- IST7 Series with Innovative 3 Level Technology is a true on-line double conversion, three-phase UPS system that provides one of the highest level energy efficiencies in the industry.
- Three level inverter & rectifier design IST7 Series brings the newest power conversion technology and delivers efficiency up to 96% at 50-75% load operation which is the most common operating range.

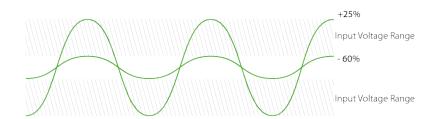


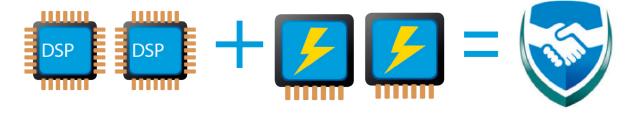






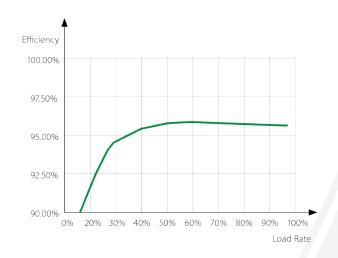
- Super wide input voltage range -60% ~ +25%
- Robust overload ability
- Dual system control card and dual bypass unit power prevent single failure point
- 3 level IGBT rectifier benefit with low THDi (<3%) and high power factor
- Bus synchronization control function provides reliable high power for the dual bus application
- 3-level IGBT inverter ensures excellent performance
- Intelligent fan control according the load capacity reduces the noise and prolongs fan service life







- High efficiency in online mode (>96%) reduces heat dissipation and limits power consumption costs
- Efficiency >99% in ECO mode gives significant cost reduction



## Example:

- 120kVA/120kW Full load running one day (24h) compare with industrial efficiency 92%
- Day saving energy:  $(120kVA \times 1.0 \times 96\% 120kVA \times 0.8 \times 92\%) \times 24h = 645.12 \text{ kWh}$
- Day saving money: 645.12 ×0.1USD/kWh= 64.512USD (hypothesis 0.1USD/kWh)
- Each year saving energy: 645.12 ×365=235468.8 kWh
- Each year saving money: 0.1 ×235468.8=23546.88 USD

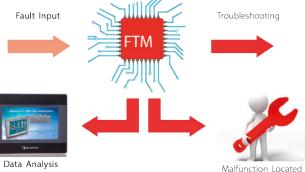






## Intelligent Management

- Fault Trace Management (FTM) for convenient failure analysis (80ms waveform record)
- Intelligent battery management system prolongs battery service life
- · HMI enables more setting and status showing
- · Auto dedusting function
- Key components pre-alarm function





- · Common battery bank sharing in parallel system
- Flexible battery configuration improves service ability
- High power density design with compact size
- Frequency converter function (60Hz to 50Hz or 50Hz to 60Hz)
- Genset is compatible
- Self-aging test function without load enables onsite commission
- Easy onsite parallel modification





Compare to normal size in the market



- Customized power distribution cabinet
- Flexible Network Management: SNMP
- Intelligent Battery Monitoring System
- Bypass voltage regulator

- · Auto Switch: STS, ATS
- Energy feedback absorber
- N+X in parallel
- Input isolation transformer



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## IST<mark>7</mark>

Model	IST7010 / IST7010L	IST7015 / IST7015L	IST7020 / IST7020L	IST7030 / IST7030L
MAIN INPUT				
Capacity	10KVA	15KVA	20KVA	30KVA
nput voltage	380/400/415V - 40/70Hz			
nput connection	3cp4W+PE			
Power factor	>0,99			
nput current THD	<3%			
nput voltage window	-20% - +15% full load			
Frequency window	40-70Hz			
BYPASS INPUT				
Bypass voltage	380/400/415V (line to line)			
Bypass voltage window	-20 - + 15% full load			
Frequency window	±5Hz			
Battery				
Battery voltage	±192VDC (±180/±204/±216/±228/±240 SETTABLE FOR LONG BACKUP TIME)			
Charger power	20% power			
Charger voltage precision	1,00%			
ОИТРИТ				
Output voltage	380/400/415V			
Voltage precision	±0,5% (balance load) 1% (unbalance load)			
Output voltage transient	5% (0-100% load step))			
/oltage THD	THD<1% (linear load) THD<5% (non linear load)			
Power factor	1			
requency tracking range	50/60Hz±3Hz, adjustable			
Frequency precision (free running)	±0,02%			
Phase tolerance	120° ±0,5°			
Voltage unbalance degree	Da 0,5Hz/s a 5Hz/s adjustable			
Frequency racking speed	3:1			
Overload capability	105% operation time - 115% after 1 hour - 130% after 10 min – 131-150% after 1 min - > 150% after 200 ms			
Bypass overload capability	125% operation time - Da 125% a 130% after 1 hour - Da 130% a 150% after 6 min - >1000% after 100 ms			
SYSTEM	·			
System efficiency	> 95%			
Battery mode efficiency	ECO mode 99%			
Battery configuration	32X7AH 12V internal	36X9AH 12V internal	36X9AH 12V internal	64/72X9AH 12V internal
Display	LED + touchscreen			
EMI	IEC62040-2			
EMS	IEC61000-4-2(ESD), IEC61000-4-3(RS), IEC6100-4-4 (EFT), IEC6100-4-5			
nsulation resistance	>2m (500Vcc)			
IP class	IP20			
nterface (communication ports)	RS232, RS485 modbus, dry contact standard / SNMP, EPO optional			
Operation temperature	0-40°C			
Relative humidity	0-95% (non condensing)			
Noise (dB)	<65dB			
Weight (Kg) internal batt model	240	250	250	350
Weight (Kg) external batt model	120	120	120	120
Dimension (W*D*H) (mm) internal batt model	320*840*1030	320*840*1030	320*840*1030	320*840*1400
, , ,				
Dimension (W*D*H) (mm) external batt model	320*840*867	320*840*867	320*840*867	320*840*867