

# ACE

6KVA ~ 10KVA (1:1)  
10KVA ~ 30KVA (3:1)  
PF 0.8



## Applications

SME Data Center  
Industrial / Military energy system  
Financial transaction / Clearing center  
Medical system , Precision instruments

## Highlights

- ✓ High reliability
- ✓ Dual input
- ✓ Strong compatibility
- ✓ High overload capacity
- ✓ Built-in isolation transformer
- ✓ Superior protection
- ✓ Powerful battery charger
- ✓ N+X redundancy parallel

*ACE series UPS is on-line double-conversion UPS with built-in output isolation transformer, offering highly reliable power for most applications, especially suitable for medical system and industrial automation system. The ACE range includes single-phase input and single-phase output versions 6/10KVA and three-phase input and single-phase output versions from 10KVA to 30KVA. Its bypass dual DSP control design and high overload capability (up to 150%) make it ideal solution to protect critical devices in harsh and unstable grid environment.*

## Features

### High reliability

- Advanced DSP digital control technology bring ACE UPS high precision, fast speed, simple control circuit and high reliability
- Standard configuration with output isolation transformer, which prevent the harm to equipment caused by DC component of UPS output voltage, effectively reduce neutral to earth voltage of output and effectively decrease the direct interference from the harmonic currents of loads to improve the UPS reliability
- High overload capability (up to 150%)
- Bypass powered by independent power supply, and inside using dual DSP redundant design. When the main control system is abnormal or fails, the bypass system can still work normally to ensure uninterruptible power supply to loads
- Superior protection (surge, short-circuit, overvoltage, under-voltage, over-charge, reverse connection protection etc), especial IGBT drive circuit and IGBT overcurrent soft-shutdown technology greatly improve the reliability and safety of the inverter
- Advanced parallel redundant configuration with current sharing control technology which not only greatly improve system reliability, reduce MTTR, but also allows users to multiply capacity and uptime for future expansion by adding additional UPS systems

### High usability and availability

- Single / single-phase models, and three / single-phase models for 380 / 400 / 415 V, 50 / 60 Hz grid system
- Wide input voltage and input frequency range make the UPS convenient to connect the generator or other power-generation equipment
- Strong compatibility, suitable for all kinds of loads (resistive, inductive, capacitive and non-linear loads)
- Dual input and hot standby in series make the system more reliable and available
- Battery cold start and mains power start are available. In the absence of mains power, battery cold start function allows users to start the UPS with the batteries to meet the emergency, and in the absence of batteries, users can start the UPS with the utility power and use it as high-precision regulated power supply
- LCD+LED display with friendly user interface and multi-functional button operation
- Abundant historical log available for future to retrieve and when fault occurs the fault code display on the screen will help maintenance personnel exclude the cause of issue

### High intelligence

- Advanced multi-platform communications: standard RS232 / USB, optional RS485 / dry contacts, SNMP communication interfaces are used for monitoring UPS running status
- Advanced intelligent battery management technology with powerful charging capability and flexible charging parameters setting: 2 A / 4 A / 6 A / 8 A / 10 A / 12 A selectable (standard configuration), 14 A / 16 A / 18 A / 20 A / 22 A / 24 A selectable (optional configuration)

## Available Options

### Communication Ports

RS485 / dry contacts, SNMP and SMS alarm

### Software

UPSmart / iStars

### Others

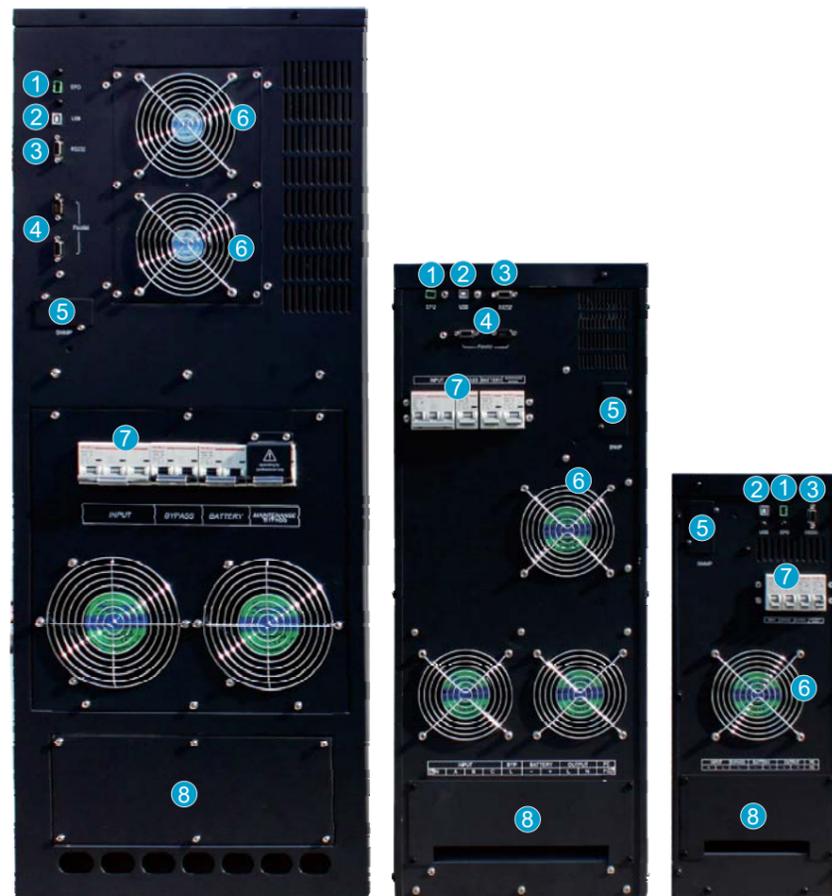
Parallel kits

Harmonic suppressor

Input isolation transformer

Bypass isolation transformer

## Details



1. EPO
2. USB
3. RS232
4. Parallel port
5. SNMP (optional)
6. Fan
7. Breaker
8. Terminal

## Technical specifications

MODEL	ACE 06 (1:1)	ACE 10 (1:1)	ACE 10 (3:1)	ACE 15 (3:1)	ACE 20 (3:1)	ACE 30 (3:1)
<b>Capacity</b>	6 KVA 4800 W	10 KVA 8 KW	10 KVA 8 KW	15 KVA 12 KW	20 KVA 16 KW	30 KVA 24 KW
<b>INPUT</b>						
Rated voltage	220 / 230 / 240 Vac (1 $\phi$ + N + PE)		380 / 400 / 415 Vac (3 $\phi$ + N + PE)			
Voltage range	165 ~ 275 Vac		285 ~ 475 Vac			
Rated frequency	50 Hz / 60 Hz					
Frequency range	40 ~ 70 Hz					
Frequency tracking range	$\pm$ 5% Hz					
<b>BYPASS</b>						
Rated voltage	220 / 230 / 240 Vac (1 $\phi$ + N + PE)					
Overload capability	Load current < 150% rated current: long time running 150% $\leq$ load current < 200%: 1 min 200% rated current $\leq$ load current: 200ms					
<b>BATTERIES</b>						
Battery voltage	192 Vdc					
Battery type	VRLAAGM maintenance-free lead based					
Number of battery	12 V $\times$ 16 pcs					
Charging voltage	220 Vdc					
EOD	168 Vdc					
Charging current	Default 8 A (2 A / 4 A / 6 A / 8 A / 10 A / 12 A selectable)					
<b>OUTPUT</b>						
Rated voltage	220 / 230 / 240 Vac (1 $\phi$ + N + PE)					
Power factor	0.8					
Waveform	Sinusoidal					
Rated frequency	50 Hz / 60 Hz (settable)					
Frequency precision	Mains mode: track bypass input in the state of synchronization Battery mode: 50 / 60 $\pm$ 0.1 Hz					
Voltage precision	$\pm$ 1%					
Recovery time of transient voltage	< 20 ms					
Crest factor	3:1					
THDV	$\leq$ 3% (linear load); $\leq$ 6% (non-linear load)					
Overload capability	Load $\leq$ 105%: long time running; 105% < load $\leq$ 125%: transfer to bypass in 10 mins; 125% < load $\leq$ 150%: transfer to bypass in 1 min 150% < load $\leq$ 200%: transfer to bypass in 200 ms 200% < load: transfer to bypass in 100 ms					
<b>OTHERS</b>						
Transfer time	0 ms					
Protections	Overload, surge, Short circuit, Over/under-voltage, battery overcharge/over-discharge, over-temperature					
Communications	RS232 / USB (standard); RS485 / SNMP / dry contacts (optional)					
Operating temperature	0 ~ 40°C					
Storage temperature	-25°C ~ 55°C (without batteries);					
Relative humidity	0 ~ 95% (non-condensing)					
Operating altitude	$\leq$ 1000 m (derating 1% for each additional 100 m)					
Noise level	< 60 dB (at 1 m)					
MTBF	MTBF > 200000 h					
MTTR	MTTR < 0.5 h					
IP rating	IP20					
Dimensions (W $\times$ D $\times$ H) (mm)	210 $\times$ 585 $\times$ 590	310 $\times$ 600 $\times$ 880		400 $\times$ 815 $\times$ 1100		
Net weight (kg)	54	96	130	201	230	277
Gross weight (kg)	64	108	142	216	245	292

\* All specifications subject to change without notice.