ES SERIES

6kVA-10kVA **1:1** PHASE

11kVA-20kVA **3:1** PHASE

ONLINE UPS





Control Panel

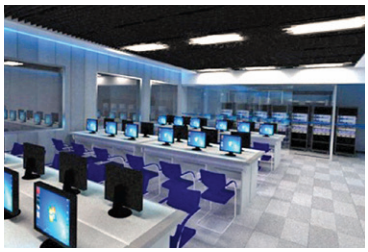
Introduction

ES series Online high frequency intelligent UPS, adopt double transform design and DSP digital control technology, with integrated input power factor correction, which can ensure a better output electrical performance and meet the requirements of equipment. LCD+LED visible interface and flexible operation also enhance customer satisfaction.

Application Area



Data Center



Education System



Security Monitoring



Automatic Control



Telecommunication



Self-service System

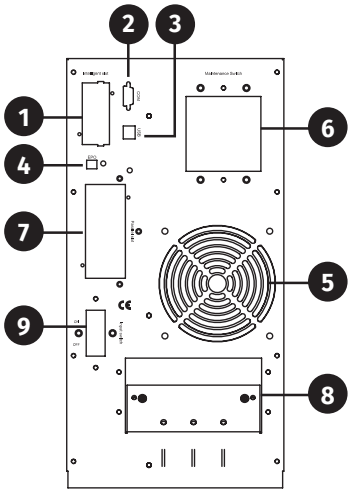
Features

- True Online, Double Conversion, PWM Technology
- Fully Digitized Microprocessor Control, High Frequency, Pure Sine Wave Output
- IGBT Based - Inverter & Rectifier
- Large input operating range, eliminates unnecessary battery discharge
- Versatile LCD human-computer interface
- Near unity power factor, high AC-AC efficiency
- Advanced Battery Management
- Automatic Battery Charge in UPS Off Mode
- Static Bypass and Cold Start
- Parallel upto 4 unit
- Optional isolation transformer
- EMI/RFI and Noise Filter
- Generator and Solar Compatible
- Auto-restart Function, ECO Mode
- Compact size, light weight, low shipping costs

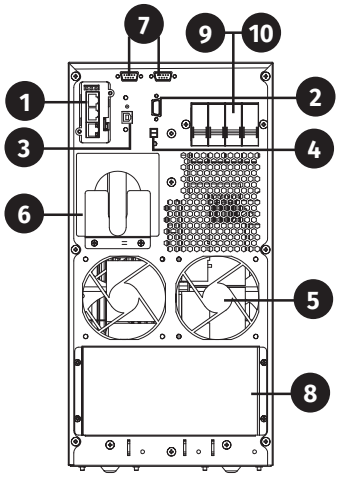
RoHS CE IS 16242 (Part 1)/ IEC 62040-1 R-41033642

ISO 9001 ISO 14001 OHSAS 18001

Back Panel



ES 6000/10000



ES 11K31/15K31/20K31

1. Intelligent Slot / SNMP (Optional)
2. RS232
3. USB
4. EPO
5. Fan
6. Maintenance switch
7. Parallel Port (Optional)
8. Wire harness mount
9. Input breaker
10. Output breaker

Electrical Parameters

Model	ES6000	ES10000	ES11K31	ES15K31	ES20K31
CAPACITY(VA/W)	6kVA/5.4kW	10kVA/9kW	9kW	15kVA/13.5kW	20kVA/18kW
INPUT					
Input Phase	Single phase with ground		3PH+N+PE		
Rated Input Voltage	220Vac/230Vac/240Vac		380Vac/400Vac/415Vac		
Acceptable Voltage Range	120-276Vac (depend upon load level)		208-478 Vac (depend upon load level)		
Frequency Range	40-70Hz				
Power Factor	>=0.99				
Total Harmonic Distortion	THDi <3%				
Generator Input	Support				
OUTPUT					
Voltage	220Vac/230Vac/240Vac can be set on panel, 220Vac (default)				
Power Factor	0.9				
Voltage Regulation	±1%				
Frequency Range	±0.05Hz, Synchronized with utility on AC mode				
Current Crest Ratio	3:1				
Harmonic Distortion	<=2% THD (Linear Load)				
Output Waveform	Pure Sinewave				
Overload Capacity	105 %~ 110 %~lasts 1 hour/110%~125%, lasts 10 minutes/ 125%~150%, lasts 1 minute/~150%~switch to bypass immediately				
Transfer Time	0ms (Utility to Battery), 15ms Typical (Inverter to Bypass)				
Economic Mode (ECO Mode)	Support (set by LCD)				
Bypass output when UPS off	Support (set by LCD)				
Efficiency	Up to 94% Double Conversion Mode, 99% Eco Mode				
BATTERY					
Quantity (12V DC)	16/18/20 pcs. can be set as per requirement				
Charging current (A) (max.)	10 Amp Max				
Charge Model	Boost Charge or Float charge auto switch				
Charging voltage (VDC)	(Depend upon no.of battery)				
Function, Communication & Standard					
LCD Indication	Input Voltage/Frequency, Output Voltage/Frequency, Battery Voltage, Load Watt/VA and %, Inverter Temperature, Operation Mode such as “On Line”, “ON Batt” or On “Bypass”, Fault Codes, Battery & Load Bar graph				
LED Indication	Normal Operation, Bypass Abnormal, Fault and Battery Mode				
Protection Function	Over Temperature, Fan Fault, Output short Circuit, Low Voltage of Battery, Over or lack of input Voltage, overload and so on				
Communication	Standard: RS232, Optional : USB, External Modbus, SNMP Card, RS-485, Dry Contact				
Standard	IEC/EN62040-1, 62040-2, 62040-3, Complying to CE, BIS				
ENVIRONMENT					
Operating temperature	Operating: 0~45°C, Storage: -25ºC ~ 55ºC				
Relative Humidity / Altitude	0~95% RH Non-condersing /<1500m. when >1500m, derating				
Noise Level	Low Audible Noise Level				
PHYSICAL					
Dimension (DxWxH) mm	480x220x438		531x220x438		
Net Weight (kg)	18	20	23.5	25	26.6