

ES SERIES

11kVA-200kVA

3:3
PHASE

ONLINE UPS



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.

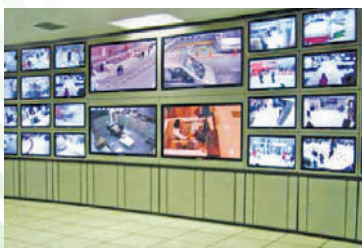
Application Area



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
- Colorful 2.4 inch TFT LCD display (optional)
- 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, Dust Filter

RoHS **CE**



Electrical Parameters

Model ES	11K33	15K33	20K33	30K33	40K33	60K33	80K33	100K33	120K33	160K33	200K33	
CAPACITY (VA/W)	9kW	15kVA/ 13.5kW	20kVA/ 18kW	30kVA/ 27kW	40kVA/ 36kW	60kVA/ 54kW	80kVA/ 72kW	100kVA/ 90kW	120kVA/ 108kW	160kVA/ 144kW	200kVA/ 180kW	
INPUT												
Input Phase	3PH+N+PE											
Rated Input Voltage	380Vac/400Vac/415Vac											
Acceptable Voltage Range	208-478 Vac (depend upon load level)					138-485 Vac (depend upon load level)						
Frequency Range	40-70Hz											
Power Factor	≥0.99											
Total Harmonic Distortion	THDi <3%											
Generator Input	Support											
OUTPUT												
Voltage	380Vac/400Vac/415Vac can be set on panel, 400Vac (default)											
Power Factor	0.9 (PF 1.0 optional)											
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											
Phase Tolerance	120°±1° (Balanced and Unbalanced Load)											
Overload Capacity	Load≤110%: last 60min, ≤125%: last 10min, ≤150%: last 1min, >150% change to bypass immediately											
Transfer Time	0ms (Utility to Battery), 0ms (Utility to Bypass)											
Economic Mode (ECO Mode)	Support (set by LCD)											
Bypass output when UPS off	Support (set by LCD)											
Efficiency	Upto 94.5% Double Conversion Mode, 99% Eco Mode					Upto 96% Double Conversion Mode, 99% Eco Mode						
BATTERY												
Quantity (12V DC)	16/18/20 pcs. can be set as per requirement				30/32/34/36/38/40/42/44/46/48/50 pcs. can be set as per requirement							
Charging current (A) (max.)	14 Amp	16 Amp	18 Amp	20 Amp	20 Amp	20 Amp	40 Amp	40 Amp	40 Amp	60 Amp	60 Amp	
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											
ENVIRONMENT												
Operating temperature	Operating: 0~45°C, Storage: -25°C ~ 55°C											
Relative Humidity/Altitude	0~95% RH Non-condensing / <1500m. when >1500m, derating											
Noise Level	Low Audible Noise Level											
PHYSICAL												
Dimension (DxWxH) mm	580x250x655					828x250x868		850x442x1200				
Net Weight (kg)	35	39	40	43	46	83	140	160	170	205	220	