ONLINE 1 PHASE UPS

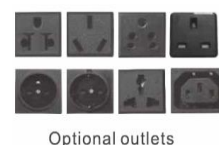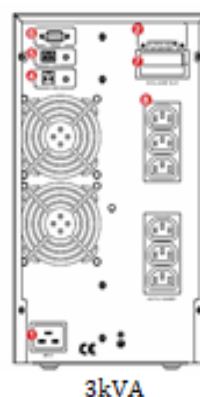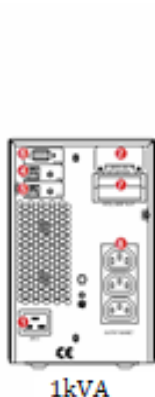## Power range: 1KVA-3KVA

Tower type

INVERTER

Features

• High frequency on-line double conversion technology

• DSP (Digital signel processors) control technology

• Active power factor correction (APFC), input power factor up to 0.99

• Output power factor 0.9/1.0

• Wide input voltage range (110V – 300Vac) and frequency range (40 – 70Hz)

• Auto-sensing frequency

• 50/60 Hz frequency conversion

• Cold start

• Rear ventilation design and variable speed fan

• Effective software and hardware protection

• Quick and stable charging, 90% capacity restored in 3h (standard model UPS)

• Linear derating in low voltage input reducing battery discharging times

• Settable delayed start when power is restored

• Advanced battery management (ABM)

• Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode

• Multi-platform communications: RS232 (standard), USB / RS485/SNMP / dry contacts (optional)

• Optional USB, RS485 card, AS400 dry contacts, SNMP card, EPO function, EPO

Rear panel

1. AC input socket
2. Battery connector (Optional)
3. Fan
4. USB (Optional)
5. EPO (Optional)
6. RS232
7. Intelligent slot (Optional)
8. Output sockets

1kVA   2kVA   3kVA

Optional outlets

Specifications

MODEL	EC1KT9/ EC1KS	EC2KT9/EC2KS	EC3KT9/EC3KS
Capacity	1 kVA / 900W	2 kVA / 1800W	3 kVA / 2700W
Operation mode	Standby mode, Bypass mode, AC mode, Bat mode, Battery self test mode, ECO mode, CUCF mode		
INPUT			
Rated voltage	1 phase 208 / 220 / 230 / 240 Vac (selectable)		
Voltage range	110-176Vac (linear derating between 50% and 100% load); 176-280Vac (no derating); 280-300Vac (derating 50%)		
Frequency	50/60Hz (auto-sensing); 40 – 70Hz		
Power factor	≥ 0.99		
Bypass voltage range	-25% - +15% (settable)		
THDi	≤ 5%		
OUTPUT			
Voltage	1 phase 208 / 220 / 230 / 240 Vac (settable via LCD)		
Voltage regulation	± 1%		
Frequency	45-55Hz or 55-65Hz (synchronized range); 50-60Hz ±0.1Hz (battery mode)		
Waveform	Pure sine wave		
Power factor	0.9		
THDv	≤ 2% (linear load), ≤ 5% (non-linear load)		
Crest factor	3:1		
Overload	105 – 125% for 1 min; 125-150% for 30s; >150% for 300ms		
Load icon with flash	% load capacity (0-25% 26-50%' 51-75%; 76-100%)		
Sockets	Universal*1 or IEC*3	Universal*2 or IEC*6	Universal*2+ Ter or IEC*6
BATTERIES			
DC voltage	36V	72V	96V
Battery type	12VDC, VRLA Sealed lead-acid, maintenance free battery, battery life ≥3years		
Inbuilt battery	3*7Ah	6*7Ah	8*7Ah
Backup time at full load	6-8 mins		
Charging current	1A (Long time model 6A)		
Recharge time	90% capacity restored in 3h		
Charger output voltage	40.7±0.6	81.3±1.2	108.4±1.6
BAT status icon	% Battery capacity (0-25% 26-50%' 51-75%; 76-100%); When the capacity of battery get low or battery disconnected, the battery status icon will flash		
SYSTEMS			
Efficiency	≥ 90% (Mains mode)	≥ 91% (Mains mode)	≥ 92% (Mains mode)
	≥ 85% (Battery mode)	≥ 86% (Battery mode)	≥ 87% (Battery mode)
	≥ 95% (ECO mode)	≥ 96% (ECO mode)	≥ 97% (ECO mode)
Transfer time	Mains mode to battery mode: 0 ms. Inverter mode to bypass mode: 4 ms (typical)		
Protections	Short-circuit, overload, overtemperature, battery discharge and fan testing protection		
Communications	RS232 (standard) with UPS management software. Surge protection for network/ Fax/Modem; Intelligent slot; USB/RS485/dty contact/SNMP (optional)		
Display & Control	LCD + LED		
	Icon display: Load, Mute, Fan, Fault, BAT status		
	Status infomation: In non-setting mode and In setting mode		
	2 light in panel: Inverter light and Fault light with warning code		

OTHERS			
Operation Temp.	0 – 40°C		
Storage temperature	-25 ~ 55°C (without battery)		
Relative humidity	0 ~ 95% (non-condensing)		
Altitude	≤ 1000m, derating 1% for each additional 100m		
Fan	Convection cooling fan		
IP rating	IP 20		
Noise level at 1m	≤ 50dB		
Dimensions (W*D*H),mm	144*317*216/144*336*216	191*419*335	191*419*335
Net weight (kg)	12.8/6	23.1/10.5	29.4/11

• *Derate capacity to 90% when the output voltage is adjusted to 208 Vac*

• *All specifications are subject to change without notice*

ECO Unlimited power supply