

# RACK & TOWER UPS

6KVA ~ 10KVA  
PF 1.0 (1:1)



## Features

- Advanced DSP and 3-level technology
- Output power factor 1.0
- Active power factor correction (APFC), input power factor up to 0.99
- High efficiency 95% (up to 98% in ECO mode)
- Advanced digital parallel technology
- Wide input voltage range (110 ~ 288 Vac) and frequency range (40 ~ 70 Hz).
- 50/ 60Hz frequency auto sensing
- Two modes of frequency conversion: 50 Hz input / 60 Hz output or 60 Hz input / 50 Hz output
- Hot-swappable battery
- Flexible battery configuration (settable 16 - 20 pcs batteries)
- Digitally controlled charger
- High charging current available (Max. 12 A)
- Charging voltage and current configured by demands
- Linear derating in low voltage input reducing battery discharging times, extending the service life of battery
- Intelligent battery management, automatic floating / equalizing charge control, charger dormancy control, increasing battery life by 50%

- Ability to switch on the UPS with batteries
- Settable delayed start time when mains power is restored, reducing the impact on power grid or generator
- Fan speed varies intelligently with temperature, reducing noise and extending its service life
- Equipped with self-aging function
- Compact internal layout, miniaturized the complete unit for small footprint
- LCD+LED display, multi-functional keys operation, friendly human-machine interface
- Powerful background software for parameters configuration
- Advanced multi-platform communications: RS232, USB, RS485, SNMP and dry contacts communication interfaces
- Effective software and hardware protection function, robust self-diagnostic function, and abundant event log for check

### Available Options

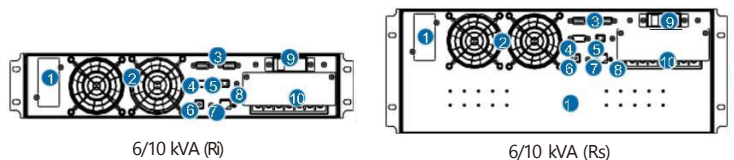
- RS232 and intelligent card slot included
- Optional parallel function, battery temperature compensation, SNMP card, USB, RS485 card, dry contacts, EMD, and SMS alarms

## Details

1. Intelligent Slot
2. Fans
3. Parallel Port (optional)
4. RS232
5. EPO
6. USB (optional)
7. Temperature Detection (optional)
8. GND
9. Bypass Breaker
10. Terminal and Cover
11. Battery Pack

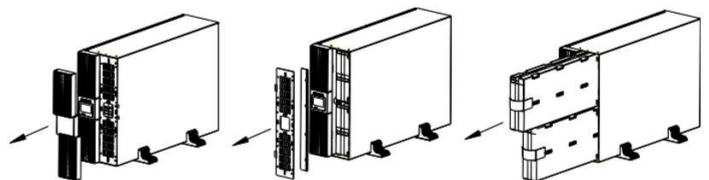


Display panel can be rotated



6/10 kVA (R)

6/10 kVA (Rs)



Easy for maintenance, hot-swappable battery

## Technical specifications

MODEL	EC6KRi/KRs	EC10KRi/KRs
Capacity	6 kVA / 6 kW	10 kVA / 10 kW
<b>INPUT</b>		
Input wiring	Single-phase three-wire (1 $\Phi$ + N + PE)	
Rated voltage	208 / 220 / 230 / 240 Vac	
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 288 Vac (no derating)	
Rated frequency	50 / 60 Hz (auto-sensing)	
Frequency range	40 ~ 70 Hz	
Power factor	$\geq 0.99$	
Bypass voltage range	- 40% ~ +15% (settable)	
Total harmonic distortion (THDi)	$\leq 5\%$	
<b>OUTPUT</b>		
Output wiring	Single-phase (L-N)	
Rated voltage	208 (PF=0.9) / 220 / 230 / 240 Vac	
Voltage regulation	$\pm 1\%$	
Frequency	Synchronized to bypass in mains mode; 50 / 60 Hz $\pm 0.1\%$ Hz in battery mode	
Waveform	Pure sine wave	
Power factor	1	
Total harmonic distortion (THDv)	$\leq 1\%$ (linear load); $\leq 4\%$ (non-linear load)	
Crest factor	3:1	
Overload	102% ~ 110% for 10 min, 110% ~ 125% for 1 min, 125% ~ 150% for 30 s	
<b>BATTERIES</b>		
DC voltage	192 Vdc (192~240 Vdc settable)	
Number of battery	16 pcs (16 ~ 20 settable)	
Inbuilt battery (KRi model)	12 V / 7Ah $\times 16$	12 V / 9Ah $\times 16$
Charging current	Standard model: 1 A; Long time model: 5 A (default), 1 ~ 5 A settable; 12 A (optional)	
Recharge time	Standard model: 90% capacity restored in 8 hours; Long time model: depend on the capacity of battery	
<b>SYSTEM</b>		
Efficiency	$\geq 94\%$ at 100% load, max. 94.5% at 60% load, $\geq 98\%$ in ECO mode	
Transfer time	0 ms	
Protections	Short-circuit, overload, overtemperature, battery low voltage, overvoltage, undervoltage and fan failure	
Max. number of parallel connections	4	
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP / battery temperature compensation (optional)	
Display	LCD + LED	
<b>OTHERS</b>		
Operating temperature	0°C ~ 40°C	
Storage temperature	-25°C ~ 55°C (without battery)	
Relative humidity	0 ~ 95% (non-condensing)	
Altitude	$\leq 1000$ m, derating 1% for each additional 100 m	
IP rating	IP 20	
Noise level at 1 m	$\leq 55$ dB	$\leq 58$ dB
Dimensions (W $\times$ D $\times$ H) (mm)	440 $\times$ 660 $\times$ 176 (KRi) 440 $\times$ 580 $\times$ 88 (KRs)	
Packaged dimensions (W $\times$ D $\times$ H) (mm)	554 $\times$ 792 $\times$ 418 (KRi) 514 $\times$ 696 $\times$ 168 (KRs)	
Net weight (kg)	58 (KRi), 12 (KRs)	63 (KRi), 14 (KRs)
Gross weight (kg)	68 (KRi), 14 (KRs)	73 (KRi), 16 (KRs)

- KRi means standard model; KRs means long time model.
- All specifications are subject to change without notice.