

UNMATCHED PERFORMANCE FOR CRITICAL POWER NEEDS



Features

Advantages

Benefits

<ul style="list-style-type: none"> • Wide input voltage range (190 ~ 499 Vac) • Linear load derating for input voltages under 305 V to reduce battery usage • Settable delayed start & Rectifier soft star function • Static bypass mode for Auto switch over during UPS fault 	<ul style="list-style-type: none"> • Maximizes Mains Mode function, reduces Battery usage, extends Battery life • Prevents Generator Overload due to starting inrush current • Seamless transfer, uninterrupted uptime 	<p>High Uptime / Availability</p>
<ul style="list-style-type: none"> • Frequency range (40 ~ 70 Hz) • Multiple Functions settable • Battery compatibility • Flexible battery configuration • Strong mixed load capacity & high over load capacity 	<ul style="list-style-type: none"> • 50 / 60 Hz Compatible & 60 / 50 Hz frequency conversion • Eco Mode, Frequency conversion mode, Output Voltage User selectable 208 / 220 / 230 / 240 V • VRLA / Li-ion Battery compatible • Settable 16 - 20 batteries. • Ensures seamless operation across diverse applications 	<p>High Flexibility</p>
<ul style="list-style-type: none"> • Online Double conversion with Advanced dual-core DSP control with 3-level topology • Remote monitoring through SNMP • Standard Emergency Power off (EPO) • Advanced Battery Management • Advanced Digital Parallel architecture • Fan speed varies intelligently with temperature • Complete Protection for connected equipment 	<ul style="list-style-type: none"> • Faster and more precise control ($\pm 1\%$ regulation), ensuring stable output power under varying load conditions with better efficiency • Allows to monitor and respond to issues quickly • Safety during faults • Improves Battery health offering predictable Power Back up. Enhances battery life time and also alert for Battery end of life • Upto 4 units parallel capacity for redundancy & load expansion • Enhanced service life • Protection against Short-circuit, Overload, Over Temperature, Over Voltage, Under Voltage, Fan Failure, Battery Low Voltage 	<p>High Reliability</p>
<ul style="list-style-type: none"> • Transformerless Design • Optimal performance with Output Unity Power Factor • Automatic Power Factor Correction @ Input for PF up to 0.99 • Less Thermal Load • Compact internal layout 	<ul style="list-style-type: none"> • Low Operating Cost - High Efficiency - Upto 95% on Online mode; 98% on Eco mode • Maximum utilization of UPS capacity • Economical sizing of the upstream network components • Better efficiency results in lower heat, saving on Air Conditioning • Reduces the floor space. 	<p>Low Total Cost of Ownership (TCO)</p>

KYKAD EH 31 SERIES 3/1 UPS (10 kVA & 20 kVA)

SPECIFICATION		
MODEL	EH 31 - 10	EH 31 - 20
Rated Capacity	10 kVA / 10 kW	20 kVA / 20 kW
INPUT		
Input Wiring	Three-phase five-wire (3Φ / 1Φ + N + PE)	
Rated Voltage	380 / 400 / 415 Vac	
Voltage Range	190 ~ 305 Vac (linear derating between 50% and 100% load), 305 Vac ~ 499 Vac (no derating)	
Rated Frequency	50 / 60 Hz (auto-sensing)	
Frequency Range	40 ~ 70 Hz	
Power Factor	≥ 0.99	
Bypass Voltage Range	-40% ~ +15% (settable)	
Total Harmonic Distortion (THDi)	≤ 5%	
OUTPUT		
Output Wiring	Single-phase three-wire (1Φ + N + PE)	
Rated Voltage	208 (PF=0.9) / 220 / 230 / 240 Vac	
Voltage Regulation	±1%	
Frequency	Synchronized to bypass in mains mode; 50 / 60Hz ± 0.1Hz in Battery mode	
Waveform	Sinusoidal	
Power Factor	1	
Total Harmonic Distortion (THDv)	≤ 1% (linear load); ≤ 3% (non-linear load)	
Crest Factor	3:1	
Overload	105% ~ 110% for 10 min, 110% ~ 125% for 1 min, 126% ~ 150% for 30 s	
BATTERIES		
DC Voltage	192 Vdc (192 ~ 240 Vdc settable)	
No. of Batteries	16 pcs (16 ~ 20 selectable)	
Charging Current (max.)	5 A (default), 1 ~ 5 A selectable; 10 A (optional)	
Recharge Time	8 hrs depends on capacity of battery	
SYSTEM		
Efficiency	≥ 94% at 100% load, max. 95% at 60% load, ≥ 98% in Eco mode	
Protections	Short-circuit, Over load, Over temperature, Battery low voltage, Over voltage, Under voltage & Fan Failure	
Max. no. of Parallel Connections	4	
Communications	Standard configuration: RS 232; Optional configuration: SNMP, RS 485, dry contacts, Battery Temperature compensation	
Display	LCD + LED	
OTHERS		
Operating Temperature	0° C ~ 40° C	
Storage Temperature	-25° C ~ 55° C (without battery)	
Relative Humidity	0% ~ 95% (non-condensing)	
Altitude	≤ 1000 m; derating 1% for each additional 100 m	
IP rating	IP 20	
Noise level at 1m	≤ 58 dB	
Dimensions (W × D × H) (mm)	191 x 495 x 350	191 x 495 x 515
Net Weight (kg)	18.5	26.5