

**ELS-33
SERIES
(10 - 60kVA)**

- ✓ High-Frequency Online Double Conversion Technology
- ✓ Advanced Dual-Core DSP Control
- ✓ Input Power Factor up to 0.99 (Active PFC)
- ✓ Dual Input Design with Independent Bypass
- ✓ Smart Fan System for Extended Lifetime
- ✓ Cold Start (Battery Start-Up Capability)
- ✓ Compact Design with 5" Color LCD Display
- ✓ Optional SNMP, Wi-Fi, GPRS Card & SMS Alerts
- ✓ EMC – LVD CE Certified
- ✓ Standard RS232, USB, RS485, EPO, Dry Contacts, Parallel Port



Buildings



Server Systems



Medical Facilities



Industrial Factories



Transportation Systems



Emergency Systems

TECHNICAL SPECIFICATIONS

MODEL	ELS-3310	ELS-3315	ELS-3320	ELS-3330	ELS-3340	ELS-3360
Capacity (kVA/kW)	10kVA/10kW	15kVA/15kW	20kVA/20kW	30kVA/30kW	40kVA/40kW	60kVA/60kW
INPUT						
Voltage	380/400/415 VAC					
Voltage Range	304 ~ 478 VAC (100% Load) / 228 ~ 304 VAC (Derates linearly with load)					
Frequency	50 - 60 Hz (Automatic Sensing)					
Frequency Range	40 - 70 Hz ±0.5%					
Input Power Factor	≥ 0.99					
Total Harmonic Distortion	≤ %5					
Bypass Voltage Range	-20% ~ +15% VAC Upper Limit; +10%, +15%, +20%, +25% / Lower Limit; -10%, -15%, -20%, -25%, -30%, -40% Selectable					
OUTPUT						
Voltage	380 / 400 / 415 VAC - Selectable from LCD Panel					
Voltage Regulation	± %1					
Frequency	Synchronized with mains; 45–55 Hz or 45–65 Hz / Battery operation 50 / 60 Hz ± 0.1 Hz					
Waveform / Output Power Factor	Pure Sine / Cos q : 1					
Crest Factor	3:1					
Harmonic Distortion	Linear Load ≤ %1 ; Non-Linear Load ≤ %3					
Transfer Time	Mains to Battery: 0 ms; Inverter to Bypass: 0 ms					
Inverter Overload Capacity	110% Load 60 min, %110-%125 Load 10 min, %125-%150 Load 1 min > %150 Load 200 ms					
Bypass Overload Capacity	125% Load (Continuous), %125-130 Load 10 min, %130-150 Load 1 min, %150-400 Load 1 s, %125-130 ≥ 400 Load 200					
BATTERY						
Battery Voltage	Standard Models; 240 VDC / 32-40 pcs (Adjustable)					
Battery Qty / Model	20 × 12V 7–9Ah	40 × 12V 7-9 Ah	60 x 12V 7-9 Ah	External Battery Required		
Battery Charging Current	Max. 10A	Max. 15A	Max. 15A	Max. 20A	Max. 20A	Max. 20A
Battery Charging Time	Standard Models: 90% capacity in 4 hours; Long-run models: depends on battery capacity					
SYSTEM						
Efficiency	Max 95%	Max 95%	Max 95%	Max 96%	Max 96%	Max 96%
Display	5" Touchscreen					
Alarm	Battery Operation / Low Battery / Fan Failure					
Parallel Operation	Up to 6 Units (Optional)					
ENVIRONMENT / COMMUNICATION / STANDARDS						
Operating Temp / Humidity	0 °C ~ 40 °C - %20 ~ %90 (Non-condensing)					
Audible Noise	≤ 58 dB (at 1 meter)					
Communication	Standard; RS 232, RS 485, USB, Optional; Programmable Dry Contact, SNMP, Parallel Kit					
DIMENSIONS						
Net Dimensions (WxDxH)-Standard	250 x 720 x 560	250 x 800 x 700	250 x 840 x 930	350 x 800 x 1280	250 x 790 x 560	
Net Dimensions (WxDxH)-Charger	250 x 720 x 560	250 x 720 x 560	250 x 840 x 650	250 x 720 x 560	350 x 850 x 818	
Package Dimensions (WxDxH)-Standard	350 x 800 x 722	350 x 900 x 862	350 x 912 x 1102	450 x 900 x 1400		
Package Dimensions (WxDxH)-Charger	350 x 800 x 718	350 x 900 x 718	350 x 980 x 810	350 x 800 x 718		
Net Weight (Kg)	82(S) / 31(L)	145(S) / 33(L)		215(S) / 42(L)	300(S) / 42(L)	48(L)
Package Weight (Kg)	93(S) / 40(L)	142(S) / 42(L)	156(S) / 42(L)	227(S) / 52(L)	310(S) / 52(L)	58(L)



COMPUTERS



NETWORK
EQUIPMENT



SECURITY
SYSTEMS



SERVER & IT
EQUIPMENT



POS
SYSTEMS



MEDICAL
DEVICES