

## TECHNICAL SPECIFICATIONS

PARAMETER	ELS-116	ELS-1110
Capacity (kVA/kW)	6kVA/5.4kW	10kVA/9kW
<b>INPUT</b>		
Phase	1Phase+N+PE	
Nominal Voltage	220/230/240VAC	
Voltage Tolerance	120VAC-276VAC	
Nominal Frequency	50/60 Hz (Auto-Sensing)	
Frequency Tolerance	45Hz-65Hz	
Power Factor	≥0.99	
Input Current Harmonic	≤5% (100% linear load, input THDv≤1%)	
Bypass Voltage Tolerance	220VAC max: +25% (+10,+15,+20,+25) 230VAC max: +20% (+10,+15,%20) 240VAC max: +15% (+10,+15) min: factory setting -45% (-20,-30,-45)	
Generator Input	Supported	
<b>OUTPUT</b>		
Phase	1Phase+N+PE	
Nominal Voltage	220/230/240VAC	
Power Factor	0.9	
Voltage Regulation	±1%	
Frequency	50/60Hz / (±0.1%)	
Crest Factor	3:1	
Output Voltage Harmonic (THDv)	≤3% (linear load), ≤5% (non-linear load)	
Waveform	Pure Sine Wave	
Efficiency**	≥90%	
<b>BATTERY</b>		
Number of Batteries	16/18/20 pcs (Adjustable)	
Capacity	16 x 12V 7-9 Ah (Standard internal battery)	
Battery Type	VRLA	
Standard Charge Current	1A	
Charge Current (Max.)	6A (Adjustable)	
Charge Time (90%)	8-10 hours (Standard)	
Transfer Time	Mains-Battery: 0ms; Mains-Bypass: 0ms	
<b>PROTECTION</b>		
Overload	105%-110% 10 min, 110%~130% 1 min, >130% transfer to bypass	
Short Circuit	System stops.	
Over Temperature	Online Mode: Transfers to bypass; Battery Mode: UPS shuts down immediately	
Low Battery	Alarm and Shutdown	
Self-Test	Software test at startup	
EPO	UPS shuts down immediately	
Battery	Advanced Battery Management	
<b>ALARMS</b>		
Visual & Audible	Input error, Low Battery, Overload, System error	
<b>DISPLAY</b>		
Status LED & LCD	Online Mode, Battery Mode, Eco Mode, Bypass Mode, Low Battery, Bad	
LCD	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temp and Ambient Temp	
<b>PHYSICAL</b>		
Dimensions - WxDxH (mm)	191x460x720	
Weight (kg)	60	61
<b>COMMUNICATION***</b>		
Standard	USB, RS232, EPO	
Optional	SNMP Adapter, Relay card	
<b>ENVIRONMENTAL</b>		
Operating/Storage Temp	0°C ~ +40°C / -25°C ~ +55°C	
Humidity	0~95% non-condensing	
Altitude	< 1500m	
Noise Level (1m)	<55 dBA	
<b>STANDARDS</b>		
Certification	CE, EN/IEC 62040-1-1, EN/IEC 62040-2	