EPOWER-L Series

10~160kVA

3:3 phase PF: 0.8

Online Double Conversion

- Online Double Conversion design helps to output a pure sine wave, which is immune from the UPS input, so that the load can run steadily
- UPS transfers among different working mode without output interruption, thereby powering the load uninterruptedly

Wide Input Range

- The range of AC input voltage is (380/400/415Vac) (-25%/+20%), minimizing transfer to battery mode, thereby greatly prolonging the battery life
- Wide input frequency ranging from 45Hz to 65Hz, ensures stability of UPS while generator connected

Optimized Battery Management

- Intelligent battery management system and advanced battery auto float/boost charge technology, reduces the frequency of battery maintenance, greatly improves the battery efficiency and extends battery life
- Battery self-test: Battery is automatically tested at regular intervals
- Flexible battery configuration ranging from 360-384Vdc

Full DSP Control

- Double DSP control makes the whole system more stable and reliable

Power Walk In

- Specially designed power walk in function, in which rectifier of each unit in parallel system will be turned on in sequence at intervals to avoid the sudden load on the generator, thereby reducing the cost of the generator required

Generator Mode

- Set the maximum output power of the generator when a smaller one than needed is employed to extend the battery duration time. In this case, the load is supplied by both the generator and battery

LBS Synchronization

- Synchronize the output of the two independent UPS systems (Single unit or parallel) even when the two systems are operating on different modes (Bypass/Inverter) or on battery

Multi-protection

- Self-diagnosis function will take place before start-up for safety
- Multi-protection: AC input under/over voltage, overload, short-circuit, over-current, over bus voltage, over-temperature, fan failure, auxiliary power failure, battery under voltage, battery over-charge and so on

N+X Parallel Redundancy

- N+X parallel redundant design, up to 6 units available, makes the configuration more flexible
  Any unit in parallel system fails, the faulty one will automatically cut off the output, and the load will be powered by the remained units
- It is easy to configure the parallel system just by connecting the parallel cables and doing proper settings
- Non-fixed Master-Slave relationship: Among several UPS in parallel, the unit startup first is Master UPS, the others are Slave. The master and slave may be exchanged

User-friendly Network Management

- Chinese/English LCD and LED mimic diagram: real time operation parameters and status (7 inch touch screen optional)
- RS232 & RS485 communication ports: For local monitor with corresponding software, both can support MODBUS protocol
- SNMP adapter (Optional): For remote monitor through network
- Dry contacts (Optional): For additional monitoring

Technical Specifications

MODEL	EP10-L	EP20-L	EP30-L	EP40-L	EP60-L	EP80-L	EP100-L	EP120-L	EP160-L
Capacity (kVA/kW)	10/8	20/16	30/24	40/32	60/48	80/64	100/80	120/96	160/128
INPUT									
Operating Voltage Range (Vac)	380/400/415Vac (-25%/ + 20%), (3Ph + PE)								
Operating Frequency Range (Hz)	50/60Hz (±5%)								
Power factor	≥0.97 *								
OUTPUT									
Output Voltage (Vac)	380/400/415Vac (±1%), (3Ph + N + PE)								
Output Frequency (Hz)	50/60Hz (±0.05%)								
Harmonic Distortion (THDv)	≤2% (Linear load)								
Crest Factor	3:1 (Max)								
Efficiency	Up to 88%	Up to 89%		Up to 90%		Up to 90.5%	Up to 92%	Up to 92.5%	
BYPASS									
Rated Voltage (Vac)	380/400/415Vac, (3Ph + N + PE)								
Rated Frequency (Hz)	50/60Hz								
Voltage Protection Range	Upper limit: +20% (+10%, +15%, +20% adjustable) Lower limit: -40% (-10%, -20%, -30%, -40% adjustable)								
Frequency Protection Range	±10% (±2.5%, ±5%, ±10%, ±20% adjustable)								
BATTERY									
Battery Voltage (Vdc)	384Vdc (360~384Vdc)								
SYSTEM FEATURES									
Transfer Time (ms)	0 ms (Line mode → Battery mode)								
Overload	Load≤110%/60min; ≤125%/10mins; ≤150%/1 min, to Bypass								
LED Display	Input, Inverter, Bypass, Battery, Output, Status								
LCD Display	I/O voltage, frequency, power, power factor, battery voltage, current, battery status, load percentage, UPS status, history record, settings								
Communication Interface	RS232, RS485, EPO, Dry contact (Optional), SNMP card (Optional)								
Optional	Harmonic filter, SNMP adapter, LBS cables, battery temperature sensor, Bypass current-sharing inductor								
ENVIRONMENTAL									
Operating Temperature (mm)	0~40℃								
Storage Temperature (mm)	-25~55℃								
Humidity Range	0~95% (Non-condensing)								
Altitude (mm)	<1500m								
Noise Level (mm)	<58dB				<68dB				
PHYSICAL									
Dimension W×D×H (mm)	350×650×1050			430×830×1100		720×690×1400		890×790×1600	
Net weight (kg)	145	155	190	242	315	365	420	635	740
Shipping weight (kg)	160	170	215	267	340	400	455	680	785
STANDARDS									
Safety	IEC/EN 62040-1; IEC 62477-1								
EMC	IEC/EN 62040-2 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2)								
Performance	IEC/EN 62040-3								

* With optional filter
1. Specifications are subject to change without prior notice
2. Data above are typical values for reference only, not as a basis for engineering design