

# E1 Series UPS 10-20 kVA | Three phase

- Three Level Inverter
- Digital Power Factor Correction

## ✓ NEW TECHNOLOGY

- Three level inverter
- High and stable online efficiency (up to 94%)
- High input PF ( $\geq 0.99$ )
- Low input current THD ( $< 5\%$ )
- Low output voltage THD ( $< 2\%$ )
- Short response time ( $< 2\text{ms}$ )
- High input and output performance

## ✓ RELIABLE & USER FRIENDLY

- Parallel option up to 6 units
- Intelligent redundancy management (n, n+1 and n+x)
- Programmable high overload capacity
- Short circuit protection
- Low investment and operation cost
- Short return on investment time
- Highest efficiency eco-mode (up to 98%)
- Reduced weight/volume/footprint
- Wide input voltage tolerances ( $-25\%$ ,  $+20\%$ )
- Cold start
- Energy-saving sleep mode
- Short circuit, lightning and surge protection
- Remote emergency power off (EPO)
- Generator compatibility
- 1-7A adjustable battery charger
- Extended battery life with intelligent battery management
- Automatic and manual battery test
- LCD interface
- Remote monitoring panel (optional)
- 512 real time event log
- Battery capacity, load percentage and ambient temperature display
- SNMP (optional), RS232, RS485, Modem, MODBUS communication
- Remote monitoring and management software
- Dry contacts and custom inputs
- Smart fan control
- Internal battery
- Manual bypass
- Easy installation and maintenance
- 10 years spare part warranty
- 7/24 technical support and customer service

## ✓ STANDARDS

- EN 62040-1 (Safety)
- EN 62040-2 (EMC)
- CE, ISO 9001:2008, ISO 14001, GOST



 %94  
Efficiency



## E1 SERIES UPS TECHNICAL SPECIFICATIONS

	Power (kVA)	10	15	20
INPUT	Voltage	380 / 400 / 415 Vac 3ph + N		
	Voltage Tolerances	- 25%, +20% (without downgrading)		
	Frequency	50 / 60 Hz		
	Frequency Tolerances	± 10%		
	Power Factor	≥ 0,99		
	THD <sub>i</sub>	< 5%		
OUTPUT	Voltage	380 / 400 / 415 Vac 3ph + N		
	Voltage Tolerances	± 1% (static load), dynamic load in accordance with VFI-SS-11		
	Frequency	50 / 60 Hz		
	Frequency Tolerances	± 0.1% (self-synchronize), ± 1% (mains-synchronize)		
	Power Factor	0,8		
	THD <sub>v</sub>	≤ 2% (linear load), ≤ 5% (non-linear load)		
	Crest Factor	3:1		
OVERLOAD CAPACITY	≤ 110%	60 min.		
	≤ 130%	10 min.		
	≤ 150%	1 min.		
	≤ 160%	10 sec.		
EFFICIENCY	Online	up to 94%		
	Eco-mode	up to 98%		
GENERAL	Technology	Three level inverter, PFC		
	Control	Dual-DSP, SPWM		
	Paralleling Units	Up to 6 units		
	Communication	SNMP(Optional), RS232, RS485, MODEM, MODBUS		
	Remote Monitoring	SNMPView, Remote monitoring panel(optional)		
	Dry Contacts	Programmable 3 dry contacts		
	Custom Inputs	Generator, Remote EPO, Remote Start/Stop		
	Cold Start	Standard		
Maintenance Bypass	Standard			
ENVIRONMENT	Operating Temperature	from 0 °C up to +40 °C (from 20 °C to 25 °C for maximum battery life)		
	Relative Humidity	0% - 85% (without condensation)		
	Maximum Altitude	≤ 2000 m		
	Noise Level	< 55 dB (A)		
UPS CABINET	Dimensions (W x D x H) (mm)	255 x 730 x 870		
	Weight (kg)	48		50
	Degree of Protection	IP20		
	Colour	RAL7012		
BATTERY	Internal Battery Quantity	30		
	Internal Battery Capacity (Ah)	7-9		
	External Battery Cabinet Socket	Standard		
STANDARDS	Safety	EN 62040-1		
	EMC	EN 62040-2		
UPS LIFETIME		10 YEARS		