# **TCA Series**

10~60kVA 3 phases Tower/Rack UPS

**Flexible Operation:** 

3/3, 3/1, 1/1 configurable







The EPI TCA Series is a high-performance True Online Double Conversion Online UPS specifically designed for mission-critical loads such as data centers, server rooms, medical equipment, telecom and industrial systems.

This series is available in power ratings from 10kVA to 60kVA and features 3/3, 3/1, 1/1 (convertible) to ensure maximum protection and uninterrupted power supply.

## **Device-level protection**

Extreme reliability, more adaptable

## **ICP (Isolation Cabin Protection)**

- Special layout: All dust-sensitive devices are placed in ICP, which are completely independent and dust-free, effectively improving reliability in harsh environments.
- Extra protection cover: Full protection of driving boards with black cover
- Less cables: Easy assembly, Easy maintenance; Less faulty





#### **Applications**

Government, finance, telecommunications, education, transportation, meteorology, radio and television, industrial and commercial taxation, medical and health, energy and power and other industries

#### **Features**

- IGBT Technology Rectifier & Inverter
- Power Factor is 1 (KW/KVA)
- Compatible 3/3, 3/1 and 1/1 operation mode.
- 100,000 history logs for historical performance and event tracking
- With parallel function, up to 3+1 parallel redundant power supply.
- Efficiency: Industry TOP efficiency up to 96%
- 3U (10-30kVA), 4U (40kVA), 7U (60kVA) spaceefficient design
- 7-inch LCD screen User-friendly interface to monitor system status easily
- Supports flexible battery setups to match backup needs (adjustable 32 - 44)
- Fully digital and intelligent battery management function to extend battery life.
- Fan failure self-check and automatic identification functions
- Provide EPO interface, realize remote shutdown function, make operation more convenient;
- Using DSP full digital control technology, Highly stable system with self-protection and fault diagnostics.
- Standard with RS232 port, USB, RS485 port, cold start, dry contact and Optional with LBS, parallel card, SNMP card.

Model	TCA010LR	TCA015LR	TCA020LR	TCA030LR	TCA040LR
Rated Power	10kVA/10kW	15kVA/15kW	20kVA/20kW	30kVA/30kW	40kVA/40kW
Main input					I
Input	3P5W (3P+N+PE)				
Rate Voltage	380/400/415VAC (L-L) ; 220/230/240VAC (L-N)				
Rate Freq.	50/60Hz				
Input PF	>0.99				
Current distortion	THDi<3% (100% Linear load)				
Voltage range	304~478VAC (L-L) full load; 228~304VAC (L-L) power derate from 100% to 75%				
Freq. range	40-70Hz				
Battery					
Rate voltage	±240VDC				
Charging capacity	20%*Pout				
Charging accuracy	±1%				
Bypass					
Rate voltage	380/400/415VAC (L-L) 220/230/240VAC (L-N)				
Voltage range	Range: -40%- +25% , Settable, default -20%~+15%				
Frequency range	50/60Hz, Settable: ±1Hz, ±3Hz, ±5Hz				
Inverter				TM	
Rate voltage	380/400/415VAC (L-L) ; 220/230/240VAC (L-N)				
Rate Freq.	50/60Hz				
Output PF			1	4	
Voltage accuracy			±1.0%		
Load response	<5% (20% - 80% -20% step load)				
Recovery time	< 20ms (0% - 100% -0% step load)				
Output THDu	<1% (linear load, <5% (non-linear load according to IEC 62040-3)				
Overload	110%,1 hour; 125%,10 mins; 150%,1 min; >150%,200ms				
Frequency accuracy	0.1%				
Synchronize window	Settable, ±0.5Hz-±5Hz, default ±3Hz				
Slew rate	Settable, 0.5Hz/S-3Hz/S default 0.5Hz/S				
Crest factor	3:1				
Phase Accuracy	120°±0.5°				
System					
Efficiency	Normal Mode ≥96% ; Battery Mode ≥96%				
Display	LED + 7-inch touch LCD				
Certification- Safety	IEC62040-1, IEC60950-1				
Electromagnetic Compatibility	EN50091-2/IEC62040-2/AS 62040-2 (C3)				
IP degree	IP20				
Configuration	USB, RS232, RS485, Dry contact				
Option	SNMP card, AS400 card, Parallel kit, LBS, Air filter, Cold start				
Environment	0-40°C (operation) ; -25°C~70°C (storage) ; 0-95% (Humidity, non-condensing)				
Weight kg		2	8kg		45kg
Dimension (W*D*H) mm		444*774	4*130 (3U)		444*788*174 (4U)