



## Key Features:

- · Double conversion online UPS with IGBT Tech
- Input power factor up to 99%
- UPS output power factor 0.9/1.0
- 3-level inverter technology enable high efficiency up to 96.5%
- Big Charger ability, with 15% total UPS power for charger
- Intelligent LCD screen support 12 languages, such as English, Russian. Spanish, French, Korean, Italy, Turkish
- Itelligent Battery Management System
- Unique cooling flue design to seperate the heat source and PCB, help to prolong UPS lifetime
- · Optional redundant parallel function, can parallel max 4 units

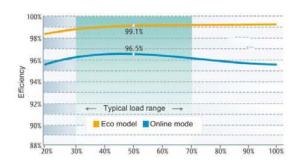
Shenzhen UPSEN Electronic CO., Ltd. www.upsen.net

# **Product Advantages**

# High-frequency UPS for small and medium-sized applications, With the best flexibility and reliability in the industry.

Efficient power protection solutions optimize your initial investment and late operating costs. Our latest ECO Mode is more than 99.1% efficient, while Online Mode is 96.5% efficient. Flexible UPS configurations help customers develop the ideal solution to help businesses achieve superior performance at lower total operating costs and meet stringent service agreement requirements.

Reliability is a core advantage of the Safe Star Series UPS, with a robust architecture that can easily handle input failures, load failures, transient overload, and input power interference for use in light industrial production environments.

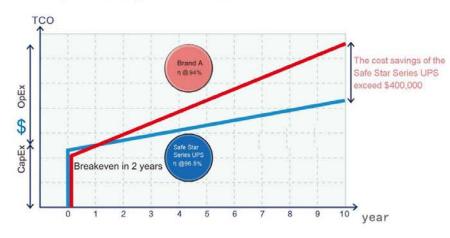


### High efficiency system

Improving energy efficiency has become a common demand in all walks of life . so many manufacturers have timely intro-duced efficient UPS system . However they ignore load efficiency under ordinary working conditions.

In most cases, the efficiency declared by UPS manufacturers is the data under full load, but in fact the system rarely runs at full load. By comparing efficiency, you can accurately predict operating costs. This is a unique feature of the Safe Star Series UPS.

TCO performance at typical 30-70% load levels

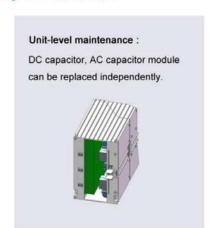


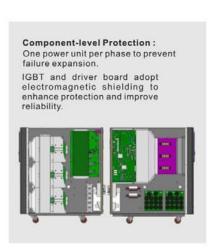
Safe Star Series UPS can continuously achieve more than 99% efficiency in ECO mode. And the efficiency is still the same in the parallel configuration. There is no need to install external accessories. So it can save high initial investment cost while ensuring high availability.

With industry-leading, efficient technology, Safe Star Series UPS minimizes emissions and helps data centers meet industry environmental and efficiency standards.

### Flexible configuration and easy maintenance

# Easy maintenance: Modular design for more flexible replacement Minimal installation space





# **Product Advantages**

### High reliability

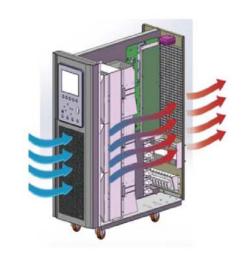
The Safe Star Series UPS is designed to maximize the safety and reliability of power supplies and leverage industry experience and expertise to achieve UPS solutions with high MTBF and low MTTR through a comprehensive service design.

The charger power of the Safe Star Series UPS can reach 15% of the rated power of the UPS. Even if the battery backup capacity is large, the sufficient charging power can be guaranteed.

Maintainability

Although there are many repair companies that can provide basic repair and maintenance services, the services provided by UPSEN can take critical maintenance activities to a new level: proactive maintenance, which can greatly extend the life of the power supply system.

The reliability of the Safe Star Series UPS is determined by many factors. But the most important thing is that it uses a solid internal architecture design which can flow the hot air generated by it only through the heat sink without affecting the PCB and other internal sensitive circuits. This function extends device life, prevents premature failure and achieves highest reliability.



### Customer monitoring interface

Combine intelligent and intuitive interfaces, system monitoring, and DCIM solutions to Infrastructure in the best performance from the start to finish.

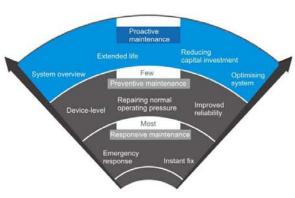
Human-computer interface:

An information-rich LCD interface, equipped with user-friendly graphics display, to help customers achieve comprehensive monitoring, effectively reduce human error.

Provides a single-line operating chart with clear system conditions. Hardware interface:

Support for multiple communication protocols for UPS monitoring: UPS and

building monitoring and automation systems can be integrated into one-body via MODBUS RTU MODBUS/TCP protocol , support dry contact communication



Model		High Frequency Online UPS Safe Star Series 10K - 120Kva									
		33S10KL	33S20KL	33S30KL	33S40KL	33S50KL	33S60KL	33S80KL	33S100KL	33S120KL	
Nominal Ratings ( KVA )		10	20	30	40	50	60	80	100	120	
	1			In	put						
Nominal in	200 / 208 / 220 or 380 / 400 / 415 38							880 / 400 / 415			
Input voltage range(V)		166 - 261Vac(line-line), full load or 228 - 478 228 - 478									
Nominal input frequency(Hz)		50 / 60									
Input frequency range(Hz)		40 - 70									
Bypass voltage	Bypass voltage tolerance(%)		Upper limit: +10%, +15%, or +20% default: +15%; Lower limit: -10%, -20%, -30% or -40% default: -20%								
Bypass frequency tolerance(%)		+/- 10% or +/- 20%, default: +/-10%									
Input power factor		>0.99									
Current THD at full linear load(THDi%)		<3%									
				Bat	tery						
Battery voltage	Standard unit		30pcs 12V 7AH	60pcs 12V 7AH	64pcs 12V 9AH	1					
\$	Long run unit	±192V ~ ±264Vdc; battery quantity 32-44 pcs (optional)									
Temperature compensation (mV/ °C/Cell)		-3.0 (selectable from 0 to -5.0 around 25°C or 30°C, or inhibit)									
Battery charger current(A)		0 ~ 20( adjustable)						0~40( adjustable)			
		70		Ou	tput						
Nominal output voltage(V)		380 / 400 / 415									
Nominal output frequency(Hz)		50 / 60									
Output power factor		1	1	1	1	1	0.9	1	1	0.9	
THDv with 100% linear load(%)		<1%									
Inverter overload capacity		110% for 60 min; 125% 10min; 150% for 1 min									
2000-00-00-00-00-00-00-00-00-00-00-00-00	-20,0779			Efficie	ncy	HERE WAS CONSERSED.					
Online mode efficiency		Up to 96.5%									
ECO-Mode efficiency		Up to 99.1%									
Parallel		Parallel up to 4 units									
		16		Dimensions	and weight						
Dimensions (W*D*H)mm	Standard unit	300*70	0*1105	300*81	300*810*1260			1			
	Long run unit	300*700*800					360*800*980				
Weight (kg)	Standard unit	146	146	194	198		,	1			
	Long run unit	74	74	74	75	75	75	115	116	118	
				Ger	neral						
Noise at 1m dB(A)		<55dB (1 meter away) <60dB (1 meter away)								away)	
Altitude		≤1500; derate power by 1% per 100m between 1500m and 300m									
Ventilation		Front to back standard									
Protection level		IP20									
General and safety		EN62040-1 / IEC62040-1									
EMC standars		EN62040-2 / IEC62040-2									
Method of specifying the performance and test		EN62040-3 / IEC62040-3									