



## THREE PHASE ONLINE DOUBLE CONVERSION UPS

GROUPS 99XX Series from 10kVA to 120kVA

10KVA ~ 120KVA (3:3)



GROUPS 99XX series UPS 10KVA-120KVA is a intelligent 3 phase in 3 phase out uninterruptible power supply, it adopts double transform high frequency PWM and high performance digital control technique (DSP), with perfect protection, super network management function, reasonable man-machine interface and a series of precision design, meets all high reliability requirements of uninterruptible power supply and integrates reliable, safety, maintainability characteristics of a new generation low frequency UPS.

### Features

- Online double-conversion with full DSP control
- IGBT inverter with output isolation transformer
- 100% unbalance load capability
- Output power factor 0.9
- Generator compatible
- Support battery cold start and auto-restart when mains power is restored
- ECO mode operation for energy saving
- Superior protection
- 5.7 inches LCD touch screen, friendly human & machine interface
- Front access makes maintenance and replacement easy (60 ~ 120KVA)
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- High MTBF (>200,000h)
- Low MTTR (<0.5h)
- Standard emergency power off (EPO)
- Standard RS232,RS485,dry contacts communication port
- Optional SNMP communication port
- Optional N+X redundancy parallel up to 6 units
- Optional input filter to improve input power factor

# Online Transformer Base UPS

## Specifications

MODEL	GROUPS 9901	GROUPS 9902	GROUPS 9903	GROUPS 9904	GROUPS 9906	GROUPS 9908	GROUPS 9910	GROUPS 9912
Capacity	10 KVA 9 KW	20 KVA 18 KW	30 KVA 27 KW	40 KVA 36 KW	60 KVA 54 KW	80 KVA 72 KW	100 KVA 90 KW	120 KVA 108 KW
<b>INPUT</b>								
Rated voltage	380 V / 400 V / 415 Vac							
Voltage range	±25%							
Rated frequency	50 / 60 Hz							
Frequency range	50 / 60 Hz ± 5 Hz							
Power factor	≥ 0.95 (with filter)							
Bypass voltage range	±20% (settable)							
Delayed start of rectifier	1 ~ 300 s (settable via display panel)							
ECO voltage range	± 10% (settable)							
<b>OUTPUT</b>								
Voltage	380 V / 400 V / 415 Vac							
Voltage regulation	± 1%							
Frequency	Synchronized with utility in mains mode; 50 / 60 Hz ± 0.1% in battery mode							
Waveform	Sinusoidal							
Power factor	0.9							
Crest factor	3:1							
Total harmonic distortion (THDV)	≤ 2% (linear load); ≤ 5% (non-linear load)							
Transfer time	AC mode to battery mode: 0 ms Inverter mode to bypass mode: 0 ms Inverter mode to ECO mode: 5 ~ 10 ms							
Inverter overload capability	105%: long time running; 105% ~ 110%: transfer to bypass in 1 h 110% ~ 125%: transfer to bypass in 10 mins 125% ~ 150%: transfer to bypass in 1 min 150% ~ 200%: transfer to bypass in 200 ms > 200%: transfer to bypass in 100 ms							
Slight adjustment of inverter output voltage	± 5 V							
<b>BATTERIES</b>								
DC Voltage	12 V × configured battery number (settable via display panel)							
Number of battery	28 ~ 32 pcs (settable)							
Charging current	10 A default / Settable							
Charging	Three-stage charging, auto switch floating / equalizing charge							
Battery state display	Display battery backup time, battery remaining capacity							
Battery self-test	Settable periodic self-test; manually configurable test time and voltage							
<b>SYSTEM</b>								
Efficiency	In line mode: Max. 93%; ECO mode: ≥ 98%							
Max. Parallel numbers	6							
Protections	Short-circuit – overload – overvoltage – undervoltage – low battery – overtemperature – fan fault							
IP rating	IP20							
EMI	EN62040-2							
EMS	IEC61000-4-2 (ESD) IEC61000-4-3 (RS) IEC61000-4-4 (EFT) IEC61000-4-5 (surge)							
<b>COMMUNICATIONS</b>								
RS232 / RS485 / dry contacts (standard)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10							
SNMP (optional)	Power management from SNMP manager and web browser							
<b>OTHERS</b>								
Humidity	0~95% RH @ 0~40°C (non-condensing)							
Noise level	55 dB		60 dB		65 dB			
Dimensions (W × D × H) (mm)	400 × 800 × 1100		600 × 700 × 1500		700 × 800 × 1700			
Packaged dimensions (W × D × H) (mm)	490 × 890 × 1170		690 × 790 × 1570		790 × 890 × 1770			
Net / Gross weight (kg)	158 / 200	175 / 217	210 / 252	260 / 302	460 / 480	590 / 620	630 / 660	690 / 720

- All specifications subject to change without notice.
- Custom-made specifications are acceptable.