

# QUEEN STAR PLUS 10K-20KVA

## High Frequency Online UPS Queen Star Plus Series

Queen Star Plus 10KVA - 20KVA (3ph in/ 1ph out)



### Key Features:

- Latest Three Level Inverter tech
- True online double conversion technology, Pure Sine Wave Output
- 0.9 Output Power Factor
- Digital LCD Screen, Zero transfer time
- DSP Technology, compact design
- Active input power factor correction (PFC)
- Protection against all types of power problems
- Wide range of input voltage and frequency
- Active Load Management, cold start function
- Sufficiency Expansion Slots for USB,AS400,CMC monitoring, SNMP,RS485 and EMD environment monitoring
- Equipped with maintenance bypass switch
- Generator Supportable
- Sealed lead acid, maintenance free battery

**Shenzhen UPSEN Electronic CO.,Ltd.**

[www.upsen.net](http://www.upsen.net)

# Technical Specification:

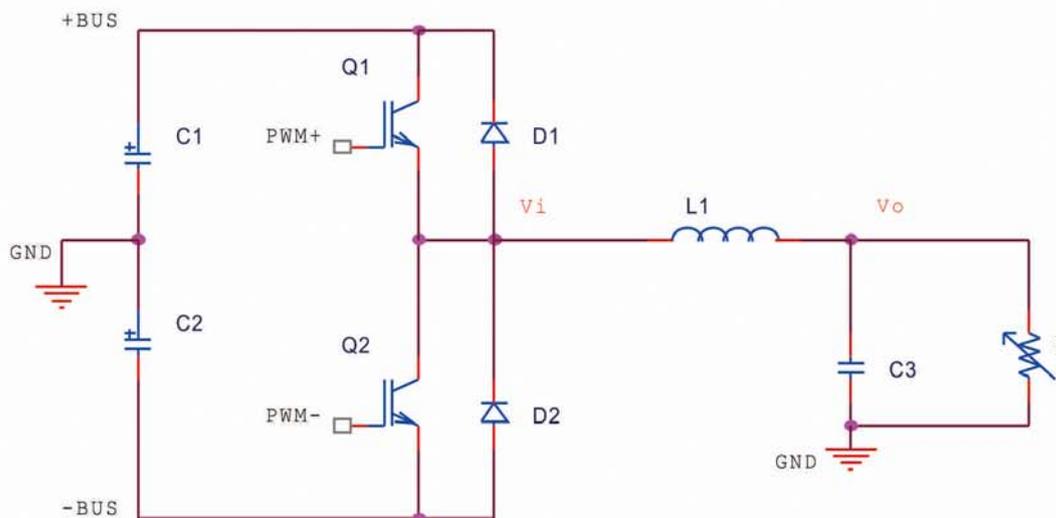
Model		31Q10KL Plus	31Q10K Plus	31Q15KL Plus	31Q15K Plus	31Q20KL Plus	31Q20K Plus
Capacity		10KVA / 9000W	10KVA / 9000W	15KVA/13.5KW	15KVA/13.5KW	20KVA/18KW	20KVA/18KW
Input	Nominal Voltage	Three-phase (380VAC/220VAC, 380VAC/230VAC)					
	Voltage Range	304~478Vac (3P4W+G)					
	Current	13A	13A	20A	20A	27A	27A
	Frequency	50Hz / 60Hz					
	Power Factor	>0.95 (Full load)					
Output	Voltage	200V / 208V / 220V / 230V / 240V					
	Voltage Regulation	±1%					
	Frequency	Line mode: (1) Synchronized 46~54Hz; (2) 50Hz (Line 40~46 and 54~ 60Hz). Battery mode: 50Hz.					
	Current	45A	45A	68A	68A	91A	91A
	Power Factor	0.9					
	Waveform	Pure Sine Wave					
	Waveform Distortion	THD < 2% Full load (Linear load)					
	Overload Capacity	105%-125% load transfers to bypass mode after 1 minutes; 125-135% load transfers to bypass mode after 30 second					
Current Crest Ratio	3:1(Max)						
Back-up Time	Full Load	Depends on external batteries bank's Capacity	16PCS*12V7AH	Depends on external batteries bank's Capacity	16PCS*12V7AH	Depends on external batteries bank's Capacity	20PCS*12V7AH
Battery Nominal Voltage		192 / 240Vdc	192Vdc (240Vdc Customization Optional)	192 / 240Vdc	192Vdc (240Vdc Customization Optional)	192 / 240Vdc	240Vdc
Transfer Time		0ms					
Communication		Standard RS232; Optional: USB, SNMP Smart Card Slot					
Operating Environment	Temperature	0C~40℃					
	Audible Noise	≤ 50 dB					
	Altitude	<1000m					
	Humidity	<95%					
Dimension	Machine Size - W*D*H(mm)	260*533*501	260*560*717	260*533*501	260*560*717	260*533*501	260*560*717
	Package Size - W*D*H(mm)	385*685*645	440*710*980	385*685*645	440*710*980	385*685*645	440*710*980
	Net Weight(KG)	32	62	33	70	33	70
	Gross Weight(KG)	35	71	36	78	36	78
*Specification are subject to change without prior notice							

# Product Advantages:

- Latest three-level inverter control tech makes UPS whole efficiency >94 % which is higher than current mainstream half bridge inverter control efficiency, and greatly improved UPS load capacity to support Air Conditioners, Laser Printers and other sensitive loads.
- The latest soft switch technology is adopted in PFC boosting process, which reduces the PFC IGBT's peak voltage and switching loss, improves the UPS voltage endurance capability to withstand lightning stroke and other instantaneous high voltage, and effectively improves the efficiency of the whole machine.
- Frequency doubling controlled PFC Circuit, which can reduce the volume of magnetic components and improve the efficiency of the whole machine.
- PFC and Inverter adopt hardware current limiting design, which effectively accelerate the response time of current limiting and improve the reliability of ups.
- More optimized structure layout makes the UPS size smaller.
- Cheaper Price.

## What's three level inverter tech?

Traditional two- level half - bridge inverter



Latest three - level inverter

