

## High Frequency Online UPS Queen Star Plus Series 6K-10KVA (1ph in/1ph out)

### Key Features

- Latest Tri-level inverter control tech, whole UPS high efficiency ≥94%
- Support sensitive loads like Air Conditioner, Laser Printer etc
- True online double conversion technology, Pure Sine Wave Output.
- 0.8 Output Power Factor, Digital LCD Screen, Zero transfer time.
- DSP Technology, compact design, cost-save price
- 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.
- Sufficient Expansion Slots for USB, AS400, CMC monitoring, SNMP/R485 and EMD environmen monitoring.
- Equipped with maintenance bypass switch.
- Generator Supportable.
- Sealed lead acid, maintenance free battery.



### Application

Network, data centre, servers and workstations, control system, communication system, Telecom system, power station, security system, hospital, school, Air Conditioner, Laser Printer, home and office etc.

### Technical Specification

Index	Q6K Plus	Q6KL Plus	Q10K Plus	Q10KL Plus	Comments
Input					
Input voltage					
Rated voltage	220VAC				
Phase	Single phase with ground				
Turn on voltage range	(120±5~274±5) VAC				
Bypass voltage range	(60±5~300±5) VAC				
Bypass low loss	60VAC-220VAC(default 60VAC)				
Bypass low comeback	Low loss +5VAC				
Bypass high loss	220VAC-300VAC(default 300VAC)				
Bypass high comeback	High loss -5VAC				
Line low loss /comeback	(120±5) VAC (140±5) VAC				
	(150±5) VAC (165±5) VAC				
	(160±5) VAC (175±5) VAC				
	(274±5)VAC(260±5)VAC				
Line high loss/comeback	(120±5) VAC (140±5) VAC				
	(150±5) VAC (165±5) VAC				
	(160±5) VAC (175±5) VAC				
	(274±5)VAC(260±5)VAC				
Input frequency					
Rated frequency	50Hz				
Frequency low loss	(40~49) ±0.2Hz(default:46Hz)				
Frequency low comeback	Frequency low loss +0.5Hz				
Frequency high loss	(51~60)±0.2Hz(default:54Hz)				
Frequency high comeback	Frequency high loss -0.5Hz				
Input power factor					
Input power factor	> 0.99				
	Q6K Plus & Q6KL Plus: 220VAC, full R load				
	Q10K Plus & Q10KL Plus: full R load				
Generator					
Generator	Support generator input				
	Generator rating:2*UPS rating				
Input current					
Rated current	25A	27A	41A	43A	
Input THDI	10%				
Output protection					
Rating protection	32A Breaker		50A Breaker		
Output power					
VA/watt	6000/4800		10000/8000		
Rated voltage	220VAC				
	Pure Sine wave				
Voltage range	200/208/220/230/240VAC				
	Q6K Plus & Q6KL Plus: Could be adjusted by software. 10% derating for 208VAC/200VAC.				
Voltage regulation	±1%				
Voltage distortion	≤6%				
	Full RCD load				
DC offset	≤2%				
	Full R load				
Transient response	≤9%				
	R load 0%~100%~0%				
Transient recovery	≤6%				
	R load 20%~100%~20%				
Bypass output before turn-on	≤60ms voltage recovery to 90%				
	Full RCD load				
Crest ration	YES				
	3:1				

Output frequency range				
Normal mode	1.Same as input frequency (46Hz-54Hz)			
Battery mode	(50±0.1) Hz			
Slew rate	1 Hz/sec			
	Efficiency			
Normal mode	> 93%			
Battery mode	> 91%			
Overload				
Normal mode/battery mode	Overload warning only			105%±5%≤load
	1min, then transfer to bypass and alarm.			105%±5%<load<125%±5%
	30S, then transfer to bypass and alarm.			125%±5%<load<135%±5%
100mS, then transfer to bypass and alarm.			load>135%±5%	
Automatically retransfer	YES			
Short protection				
Normal/battery mode	YES			
Transfer time	0ms			
Battery and charger				
Battery				
Rated voltage	192VDC			
Type-Rating	Sunshine 7AH/12V		Sunshine 9AH/12V	
Battery quantity	16 PCS		16 PCS	
Backup time	> 14min		>8min	
			Half load	
Protection				
Low alarm voltage / comeback voltage	(180.8V±4V) (188.8V±4V)			
Shutdown voltage/ comeback voltage	(176V±4V) (184V±4V)	(176V±4V) (184V±4V)	(176V±4V) (184V±4V)	(176V±4V) (184V±4V)
				Load < 1000W
	(152V±4V) (160V±4V)	(160V±4V) (168V±4V)	(152V±4V) (160V±4V)	(160V±4V) (168V±4V)
				Load= 1000W
DC protection				
Overcharge protection/ comeback voltage	(249.6V±4V) / (216V±4V)			
Leakage current	< 500uA			
Over discharge protection	14.5h			
	Could be set by software			
Battery test				
Battery weak	YES			
Battery fault	YES			
Charger				
Output voltage	(219.2~3)VDC			
Charge time	7 hours to 90% capacity			
Charge current	1A	5.5A	1A	5.5A
Interface				
Alarm silence	YES			
DC power turn-on	YES			
Automatically retransfer	YES			
Environment				
Work temperature	0°C~40°C			
Altitude	≤1000m			
Audible noise	≤55dB		≤60dB	
Storage temperature	-15°C~45°C			
Work humidity	20%~95%			
Online dimension and net weight				
L*W*H(mm)	533*260*560	425*190*328	533*260*560	533*260*501
Net weight (Kg)	55kg	12.2kg	62kg	21kg