

Q-on S-Series UPS Data Sheet

powermode



powermode

www.powermode.co.za
power@powermode.co.za
011-235-7750

Johannesburg

8 Ranworth Crescent,
Modderfontein,
Longlake, Ext 23,
1645

Durban

89 Watsonia Road,
Bluff, Durban,
4052

Cape Town

11 Platinum Crescent,
Unit 1, Iberica Park,
Milnerton,
7441

East London

50 Riverwood,
Eco Estate,
Willow Park,
5201

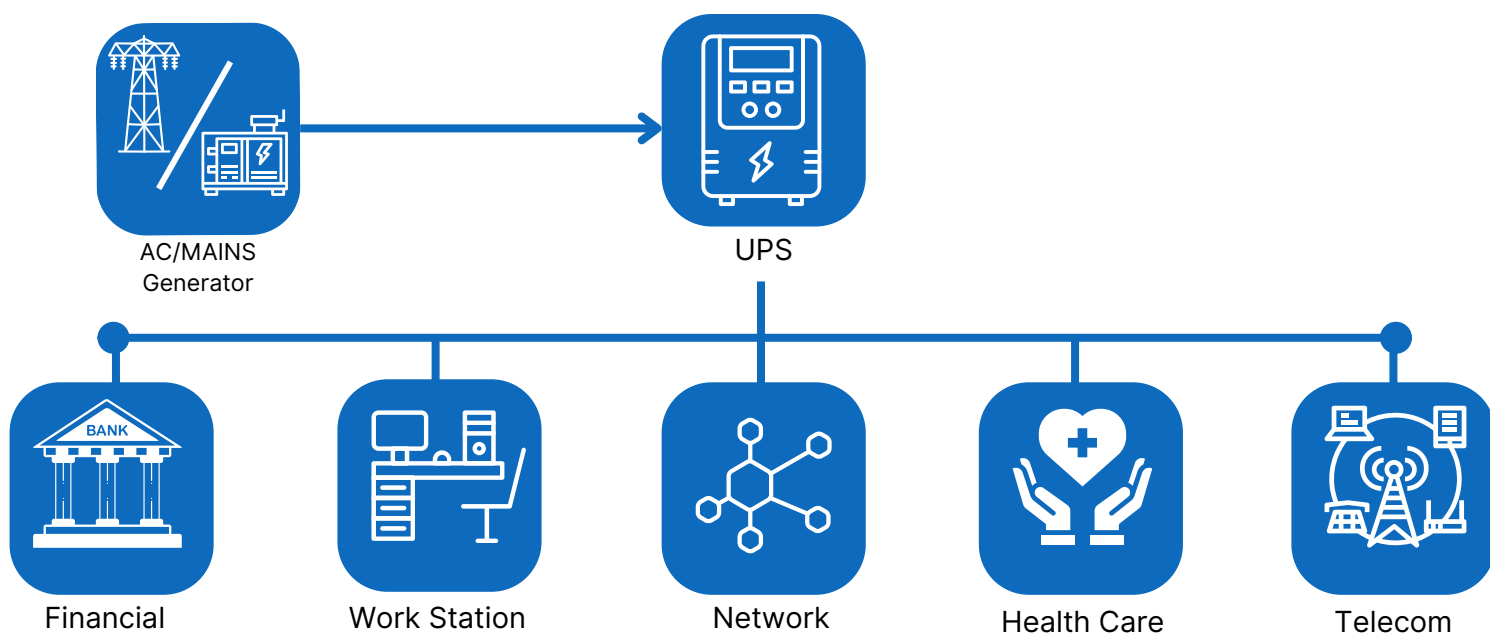
Q-on S-Series Single Phase UPS



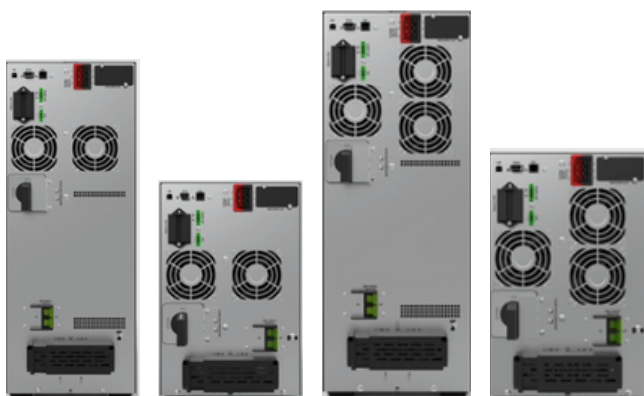
Key Features

- True double-conversion design with high adaptability to harsh mains conditions
- PF=1 (VA=Watt)
- DSP design enables precise and reliable control
- High efficiency
- Energy-saving ECO mode
- Compact size
- Built-in OVCD protection, fan lock detection, over temperature detection, overload warning.
- USB HID enable monitoring of UPS.
- Intelligent communication slot enables remote monitoring
- Programmable LCD display for quick UPS parameters configuration

Typical Application



Q-on S-series UPS Rear Panel View



Q-on S-series 6K/KL & 10K/KL Dual Online UPS

TECHNICAL SPECIFICATIONS



Model name		QS6K	QS6KL	QS10K	QS10KL
Power rating	VA/Watt	6000VA/6000W	6000VA/6000W	10000VA/10000W	10000VA/10000W
Efficiency	Double conversion mode	95%	95%	95%	95%
	ECO mode	98%	98%	98%	98%
Input performance	Voltage range	160-276V 100% load, 110-160V derating to 50% load linearly	160-276V 100% load, 110-160V derating to 50% load linearly	160-276V 100% load, 110-160V derating to 50% load linearly	160-276V 100% load, 110-160V derating to 50% load linearly
	Rated frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
	Frequency range	40Hz-70Hz (45Hz-55Hz)	40Hz-70Hz (45Hz-55Hz)	40Hz-70Hz (45Hz-55Hz)	40Hz-70Hz (45Hz-55Hz)
	PF	54Hz-66Hz @ load>60%)	54Hz-66Hz @ load>60%)	54Hz-66Hz @ load>60%)	54Hz-66Hz @ load>60%)
	THDI	>0.995	>0.995	>0.995	>0.995
Input connection	Wiring/socket	L/N/PE hardware terminal connection	L/N/PE hardware terminal connection	L/N/PE hardware terminal connection	L/N/PE hardware terminal connection
Output performance	Rated voltage	220/230/240V	220/230/240V	220/230/240V	220/230/240V
	Rated frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
	Maximum PF	1	1	1	1
	Voltage accuracy	±1%	±1%	±1%	±1%
	Th.D.	<1% linear load <5% non-linear load	<1% linear load <5% non-linear load	<1% linear load <5% non-linear load	<1% linear load <5% non-linear load
	Transfer time	0ms (10ms @ ECO->Inverter)	0ms (10ms @ ECO->Inverter)	0ms (10ms @ ECO->Inverter)	0ms (10ms @ ECO->Inverter)
	Crest Ratio	max 3:1	max 3:1	max 3:1	max 3:1
	Overload (line mode)	100%<load≤105% continuous. 105%< load ≤125% for 10 minutes 125<load≤150% for 30 seconds. >150% for 500ms.	100%<load≤105% continuous. 105%< load ≤125% for 10 minutes 125<load≤150% for 30 seconds. >150% for 500ms.	100%<load≤105% continuous. 105%< load ≤125% for 10 minutes 125<load≤150% for 30 seconds. >150% for 500ms.	100%<load≤105% continuous. 105%< load ≤125% for 10 minutes 125<load≤150% for 30 seconds. >150% for 500ms.
Output connection	Wiring/socket	L/N/PE hardware terminal connection	L/N/PE hardware terminal connection	L/N/PE hardware terminal connection	L/N/PE hardware terminal connection
Battery	Voltage	192VDC (192~240VDC adjustable)	192VDC (192~240VDC adjustable)	192VDC (192~240VDC adjustable)	192VDC (192~240VDC adjustable)
	Capacity (AH)	16*12V/7Ah, 16~20pcs adjustable	NA	16*12V/9Ah, 16~20pcs adjustable	NA
	Backup time PF=0.9; 100% load)	4.5min	NA	3min	NA
Maximum connect external battery module quantity	External battery module quantity	6	6	6	6
Charger	Maximum charging current	1.4A(0-4A adjustable)	4A (2-12A adjustable)	2A (0-4A adjustable)	4A (2-12A adjustable)
	Recharging time	3h to 90%	3h to 90%	3h to 90%	3h to 90%
Other working mode	CVCF	Yes (derating to 60% load)	Yes (derating to 60% load)	Yes (derating to 60% load)	Yes (derating to 60% load)
	Parallel	Optional (up to 3)	Optional (up to 3)	Optional (up to 3)	Optional (up to 3)

TECHNICAL SPECIFICATIONS



Model name		QS6K	QS6KL	QS10K	QS10KL
Output performance	Rated voltage	220/230/240V	220/230/240V	220/230/240V	220/230/240V
	Rated frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
	Maximum PF	1	1	1	1
	Voltage accuracy	±1%	±1%	±1%	±1%
	Th.D.	<1% linear load <5% non-linear load	<1% linear load <5% non-linear load	<1% linear load <5% non-linear load	<1% linear load <5% non-linear load
	Transfer time	0ms (10ms @ ECO->Inverter)	0ms (10ms @ ECO->Inverter)	0ms (10ms @ ECO->Inverter)	0ms (10ms @ ECO->Inverter)
	Crest Ratio	max 3:1	max 3:1	max 3:1	max 3:1
	Overload (line mode)	100%<load≤105% continuous.	100%<load≤105% continuous.	100%<load≤105% continuous.	100%<load≤105% continuous.
		105%< load ≤125% for 10 minutes	105%< load ≤125% for 10 minutes	105%< load ≤125% for 10 minutes	105%< load ≤125% for 10 minutes
125<load≤150% for 30 seconds.		125<load≤150% for 30 seconds.	125<load≤150% for 30 seconds.	125<load≤150% for 30 seconds.	
>150% for 500ms.		>150% for 500ms.	>150% for 500ms.	>150% for 500ms.	
Physical performance	Dimension(W*D*H) mm	220*492*589	220*492*348	220*492*589	220*492*348
	Net Weight (KG)	52.7	13	60.3	15.2
	IP protection level	IP20	IP20	IP20	IP20
Environment	Operating temperature	0-50°C (power derating to 50% @40-50°C)	0-50°C (power derating to 50% @40-50°C)	0-50°C (power derating to 50% @40-50°C)	0-50°C (power derating to 50% @40-50°C)
	Relative Humidity	0-95%	0-95%	0-95%	0-95%
	Operating Altitude	0~3000m (the load derating 1% every up 100m @1000~3000m)	0~3000m (the load derating 1% every up 100m @1000~3000m)	0~3000m (the load derating 1% every up 100m @1000~3000m)	0~3000m (the load derating 1% every up 100m @1000~3000m)
	Acoustic Noise	<45dB @ typical load with battery fully charged	<45dB @ typical load with battery fully charged	<50dB @ typical load with battery fully charged	<50dB @ typical load with battery fully charged
Certification	Certification/standard	CE, IEC/EN 62040	CE, IEC/EN 62040	CE, IEC/EN 62040	CE, IEC/EN 62040
EMI	Conduction/Radiation	C3	C3	C3	C3
EMS	ESD	IEC/EN 61000-4-2	IEC/EN 61000-4-2	IEC/EN 61000-4-2	IEC/EN 61000-4-2
	RS	IEC/EN 61000-4-3	IEC/EN 61000-4-3	IEC/EN 61000-4-3	IEC/EN 61000-4-3
	EFT	IEC/EN 61000-4-4	IEC/EN 61000-4-4	IEC/EN 61000-4-4	IEC/EN 61000-4-4
	Surge	IEC/EN 61000-4-5	IEC/EN 61000-4-5	IEC/EN 61000-4-5	IEC/EN 61000-4-5
Accessory	Maintenance bypass switch	Standard offer	Standard offer	Standard offer	Standard offer
	Input power cable	NA	NA	NA	NA
	Output power cable	NA	NA	NA	NA
	EBM cable	yes (in EBM)	yes (in EBM)	yes (in EBM)	yes (in EBM)
	USB cable	Yes	Yes	Yes	Yes
	RS232 cable	Optional	Optional	Optional	Optional
	Manual	Yes	Yes	Yes	Yes