

GUDEOX

QH-S3~6K Single-phase Hybrid Inverter

3kW / 3.6kW / 4kW / 5kW / 6kW



Efficient and reliable

Retrofit function: intelligent AC coupling solution for easy upgrade of existing grid-connected systems

Smart UPS, plug & play, seamless switching under 20 seconds to give sufficient backup power for emergency use

Up to 200% surge power backup overload capability in 10 seconds



User friendly

Color LED display with intuitive multilingual software

Online monitoring via app
Remote control and upgrade function



Easy to install

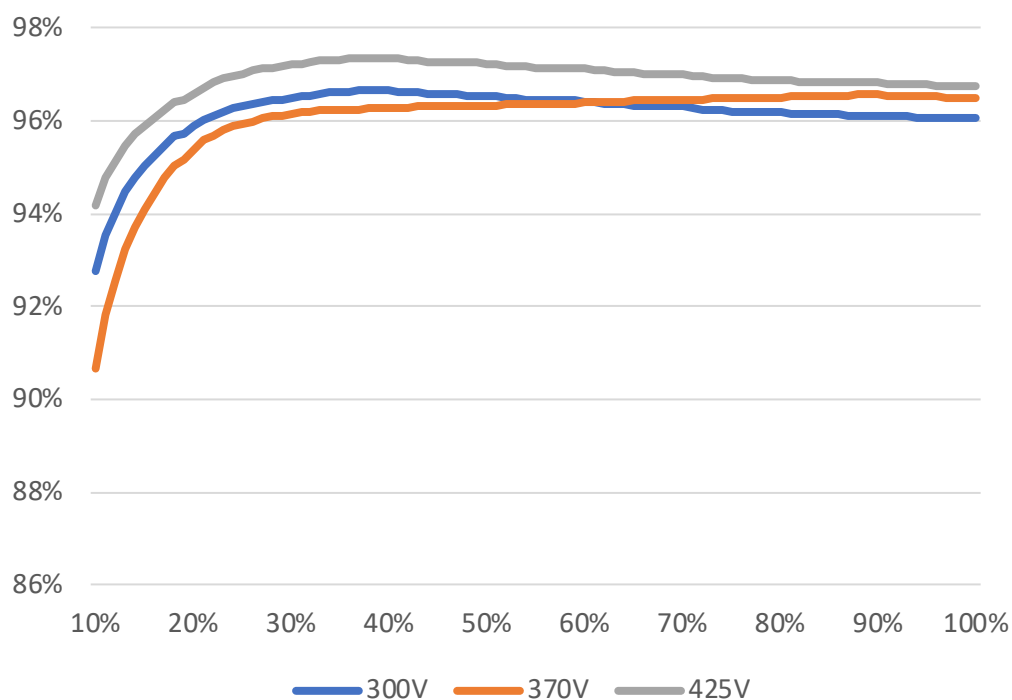
Compatible with lithium-ion, lead-acid and sodium batteries

Pre-wired communication cables for plug and play

Supports single-phase and three-phase flexible parallel installation

Technical Data	QH-S3K	QH-S3.6K	QH-S4K	QH-S5K	QH-S6K
Input DC (PV side)					
Maximum PV access power	6kW	7.2kW	8kW	10kW	12kW
Maximum PV input power	4.68kW	5.76kW	6.4kW	8kW	9.6kW
Maximum PV input voltage			500V		
Start-up voltage			100V		
MPPT voltage range			150V~425V		
Rated PV input voltage			370V		
Maximum operating PV input current			20A / 20A		
Maximum input short-circuit current			30A / 30A		
Number of MPPT / strings per MPPT			2 / 1+1		
Battery input data					
Battery type		Lithium / Lead-acid / Sodium			
Battery voltage range			40V~60V		
Maximum charge/discharge current	62.5A			100A	
Communication			CAN/RS485		
Number of battery input			1		
AC input/output data					
Rated AC input/output active power	3kW	3.6kW	4kW	5kW	6kW
Maximum AC input/output apparent power	3.3kVA	3.96kVA	4.4kVA	5.5kVA	6.6kVA
Rated AC input/output current	13.7A / 13.1A	16.4A / 15.7A	20.9A / 20A	22.8A / 21.7A	27.3A / 26.1A
Maximum AC input/output Current	15.1A / 14.4A	18A / 17.3A	23A / 22A	25.1A / 23.9A	30A / 28.7A
Maximum continuous AC passthrough (grid to load)			35A		40A
Peak power (off-grid)			2 times of rated power, 10s		
Power factor adjustment range			0.8 leading to 0.8 lagging		
Rated input/output voltage/range			220V/230V 0.85Un~1.1Un		
Rated input/output grid frequency/range			50Hz/45~55Hz, 60Hz/55~65Hz		
Grid connection form			L+N+PE		
Total current harmonic distortion THDi			<3% (of nominal power)		
DC injection current			<0.5% In		
Efficiency					
Maximum efficiency			97,10%		
Euro efficiency			96,50%		
MPPT efficiency			>99%		
Equipment protection					
Integrated	DC reverse-polarity protection, Short circuit protection, Output over current protection, Surge protection (DC Type II / AC Type II), Ground fault monitoring, Integrated AFCI (DC arc-fault circuit protection, Activation required), Protection class/Over voltage category (I/II)				
Surge protection level	Type II (DC), Type II (AC)				
Interface					
Communication interface	RS485/CAN				
Monitor mode	RS485, Wi-Fi, GPRS (optional)				
General data					
DC connection	MC4 connector				
AC connection	Quick connection plug				
Display	69.6x55 mm LCD screen display				
Operating temperature	-40°C~60°C (>45°C derating)				
Operating relative humidity	0%~100%				
Maximum operating altitude	2000 m				
Ingress protection rating	IP65				
Inverter topology	Non-isolated				
Over voltage category	OVC II (DC), OVC III (AC)				
Cooling method	Natural cooling				
Weight	20 kg				
Dimensions (WxDxH)	420x247x458 mm				
Grid regulation	EN 50549, CEI 0-21, UNE 217002				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

PV efficiency curve (QH-S6K)



Electric diagram

