



* Outlook of the product may be subject to change without notice during product improving.

QX-12K/15K/20K/30K/40K/50K -HB1-EU

- AC couple to retrofit existing solar system
- Up to 4 MPPTs, Max. charging/discharging current up to 50A
- Max. 6 pcs in Parallel
- 6 time periods for battery charging/discharging
- On-grid and off-grid operation; Support multiple batteries in parallel
- Color touch screen
- IP65 protection grade
- Support storing energy from diesel generator

Specifications

Model	QX-12K-HB1-EU	QX-15K-HB1-EU	QX-20K-HB1-EU
Battery Input Data			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160-700V		
Max. Charging Current (A)	37A		
Max. Discharging Current (A)	37A		
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	2		
PV String Input Data			
Max. PV Input Power (W)	15600W	19500W	26000W
Max. PV Input Voltage (V)	1000V		
Start-up Voltage (V)	180V		
MPPT Voltage Range (V)	325-850V		
Rated PV Input Voltage (V)	600V		
Full Load DC Voltage Range	450-850V		
Max. Operating PV Input Current (A)	26A + 26A		
No. of MPPT	2		
No. of Strings per MPPT	2+2		
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	12000	15000	20000
Max. AC Input/Output Apparent Power (VA)	13200	16500	22000
Peak Power(off-grid)	1.5 times of rated power, 10s		
Rated AC Input/Output Current (A)	18.2/17.4	22.8/21.8	30.4/29
Max. AC Input/Output Current (A)	20/19.2	25/24	33.4/31.9
Max. Continuous AC Pass through(A)	80		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Output Frequency and Voltage	50/60Hz; 3L+N+PE, 220/380V, 230/400V (three phase)		
Grid Type	Three Phase		
Total Current Harmonic Distortion THDi	<3% (of nominal power)		
DC Injection Current	<0.5% In		
Efficiency			
Max. Efficiency	97.6%		
Euro Efficiency	96.5%		
MPPT Efficiency	>99%		
Equipment Protection			
Integrated	PV Arc Fault Detection, PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
Over Voltage Category	DC Type II / AC Type III		
Interface			
Battery Communication Interface	RS485/CAN		
Monitor Mode	RS485/USB/CAN/Wifi/GPRS(optional)		
General Data			
Operating Temperature Range (°C)	-30 to +55°C		
Permissible Ambient Humidity	0-95%		
Permissible Altitude	2000m		
Noise (dB)	<30		
Ingress Protection(IP) Rating	IP65		
Inverter Topology	Non-Isolated		
Cabinet Size (WxHxD mm)	460W × 250H × 686D		
Weight (kg)	31		
Type of Cooling	Smart Air Cooling		
Warranty	5 Years		
General Data			
Grid Certification	IEC61727/62116,EN50549 -1		
Safety/EMC Standards	IEC/EN 62109-1,IEC/EN 62109-2,IEC/EN 61000-6-1, IEC/EN 61000-6-2,IEC/EN 61000-6-3,IEC/EN 61000-6-4		

Specifications

Model	QX-30K-HB1-EU	QX-40K-HB1-EU	QX-50K-HB1-EU
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	160-800V		
Max. Charging Current (A)	50A		
Max. Discharging Current (A)	50A		
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	2		
PV String Input Data			
Max. PV Input Power (W)	39000W	52000W	65000W
Max. PV Input Voltage (V)	1000V		
Start-up Voltage (V)	180V		
MPPT Voltage Range (V)	150-850V		
Rated PV Input Voltage (V)	600V		
Full Load DC Voltage Range	450-850V		
Max. Operating PV Input Current (A)	36A + 36A + 36A	36A + 36A + 36A + 36A	36A + 36A + 36A + 36A
No. of MPPT	3	4	4
No. of Strings per MPPT	2 + 2 + 2	2 + 2 + 2 + 2	2 + 2 + 2 + 2
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	30000	40000	50000
Max. AC Input/Output Apparent Power (VA)	33000	44000	55000
Peak Power(off-grid)	1.5 times of rated power, 10s		
Rated AC Input/Output Current (A)	45.5/43.5	60.7/58	75.8/72.5
Max. AC Input/Output Current (A)	60/57.6	70/67.2	83/79.7
Max. Continuous AC Pass through(A)	150		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Output Frequency and Voltage	50/60Hz; 3L+N+PE, 220/380V, 230/400V (three phase)		
Grid Type	Three Phase		
Total Current Harmonic Distortion THDi	<3% (of nominal power)		
DC Injection Current	<0.5% In		
Efficiency			
Max. Efficiency	97.6%		
Euro Efficiency	96.5%		
MPPT Efficiency	>99%		
Equipment Protection			
Integrated	PV Arc Fault Detection, PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
Over Voltage Category	DC Type II / AC Type III		
Interface			
Battery Communication Interface	RS485/CAN		
Monitor Mode	RS485/USB/CAN/Wifi/GPRS(optional)		
General Data			
Operating Temperature Range (°C)	-30 to +55°C		
Permissible Ambient Humidity	0-95%		
Permissible Altitude	2000m		
Noise (dB)	<30		
Ingress Protection(IP) Rating	IP65		
Inverter Topology	Non-Isolated		
Cabinet Size (WxHxD mm)	570W×320H×945D		
Weight (kg)	84		
Type of Cooling	Smart Air Cooling		
Warranty	5 Years		
General Data			
Grid Certification	IEC61727/62116,EN50549 -1		
Safety/EMC Standards	IEC/EN 62109-1,IEC/EN 62109-2,IEC/EN 61000-6-1, IEC/EN 61000-6-2,IEC/EN 61000-6-3,IEC/EN 61000-6-4		