Q.HOME+
ESS HYB-G3-1P (-D)

Energy Storage Solution

Hybrid Inverter 3.7 / 5.0 / 6.0 kW | 3.0 / 6.0 / 9.0 / 12.0 kWh
Up to 97.6 % Conversion Efficiency

MODEL Q.VOLT HYB-G3-1P (-D) | Q.SAVE MATEBOX-G3-1P | Q.SAVE-G3



Q.VOLT HYB-G3-1P (-D)**

Q.SAVE MATEBOX-G3-1P

Q.SAVE-G3

Quick and easy installation

Modular type setting for faster and easier installation

Supports 200 % oversized PV power

Two MPPTs with wide voltage range.
Excess energy to Battery.

Fast charging and high power discharge

Max. 30 A charge and discharge current

Remote control and upgrading function

External control communication interface

Working under extremely cold conditions

Working in full load under extreme cold temperature of –30 °C.*

On and off grid parallel use

Inverter on and off grid parallel to support higher power loads

Unbalanced output supported

Prevent voltage imbalance when using high-power electrical appliances

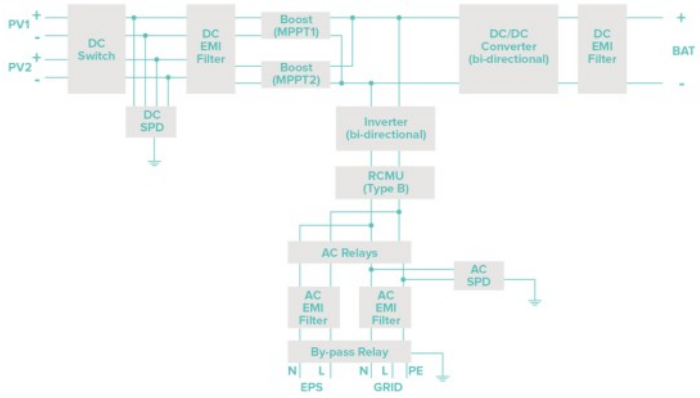
Shadow fix function for optimised yield

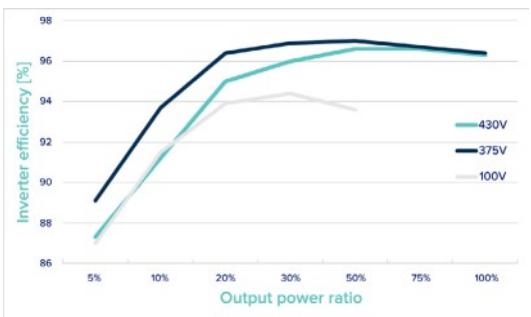
The inverter is able to find the best operating point to maximise the power output

* Battery Heating must be on and SoC must be set up to 20 %.
** D variant with integrated DC switch for parallel installation.

Q.VOLT HYB-G3-1P

		Q.VOLT HYB-G3 X.X kW 1P (-D) (-BE)		
		3.7	5.0	6.0
INPUT - DC				
Max. recommended PV power	[kWp]	7.4	10.0	12.0
Max. voltage (nominal operating voltage)	[V]		600 (360)	
Max. input current (short circuit current) (input A / input B)	[A]		16 (20) / 16 (20)	
MPPT voltage range (start operating voltage)	[V]		70 - 550 (90)	
No. of MPP trackers / Strings per MPP tracker			2 / A:1, B:1	
INPUT - AC				
Max. apparent AC power	[kVA]	7.36	9.2	9.2
Max. current	[A]	32	40	40
Nominal grid voltage (voltage range)	[V]		220 / 230 / 240 (180 - 270), 1P/N/PE	
Nominal grid frequency	[Hz]		50 / 60	
OUTPUT - AC				
Nominal (max.) power	[kVA]	3.68 (3.68)	5.0 (5.5)	6.0 (6.6)
Nominal grid voltage (AC voltage range)	[V]		220 / 230 / 240 (180 - 270), 1P/N/PE	
Nominal grid frequency	[Hz]		50 / 60	
Rated current (Max. current)	[A]	16 (16)	21.7 (23.9)	26.1 (28.6)
Short circuit current	[A]	20.8	29.8	34.3
Displacement power factor			0.8 leading 0.8 lagging	
THDi, rated power	[%]		< 2	
OUTPUT - AC / EPS (WITH BATTERY)				
Max. continuous apparent power	[kVA]	3.68	5.0	6.0
Rated voltage	[V]		230	
Rated frequency	[Hz]		50 / 60	
Max. continuous current	[A]	16	21.7	26.1
Peak apparent power	[kVA]	4.41	6.0	7.2
Duration	[s]		600	
Changeover time	[ms]		< 100	
THDv, linear Load	[%]		< 2	
EFFICIENCY				
MPPT efficiency	[%]		99.5	
Euro efficiency (max. efficiency)	[%]		97.0 (97.6)	
Battery charge / discharge efficiency	[%]		97.0 / 97.0	
COMPLIANCE				
Safety			EN 62109-1 / EN 62109-2	
EMC			EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 / EN 61000-6-4 / EN 61000-3-2 / EN 61000-3-3 / EN 61000-3-11 / EN 61000-3-12	
Certification (more available upon request)			VDE 4105 / G99 / G98 / EN 50549-1 / CEI 0-21 / VDE 0216 / VFR 2019 / PPDS	
SAFETY & PROTECTION				
Overvoltage protection (integrated SPD)			AC (Type II) / DC (Type II)	
Integrated safety functions		• Over/under voltage protection • Grid protection • DC injection monitoring	• Back feed current monitoring • Residual current detection • Anti-islanding protection	• Over load protection • Over heat protection •Array insulation resistance detection
DC switch			Yes (D variant)	
ENVIRONMENT LIMIT				
Protection degree			IP65	
Protection class			Class I	
Operating temperature range	[°C]		−35 - +60 (derating at +45)	
Max. operation altitude	[m]		3000	
Relative humidity	[%]		0 - 100 (non-condensing)	
Storage temperature	[°C]		−40 - +65	
Typical noise emission	[dB]		< 30	
GENERAL DATA				
Dimensions (W × H × D)	[mm]		482 × 417 × 181	
Weight	[kg]		22	
Over voltage category (OVC)			III (AC) / II (DC)	
Cooling concept			Natural convection	
Topology			Non-isolated	
Communication interfaces			CT, E-Meter / WLAN, Ethernet (both with adapter) / USB (for local upgrade) / Dry Contact (with adapter) / RS485 / CAN 2.0	
LCD display			Backlight, 20 × 4 character	
Warranty	[Year]		10	



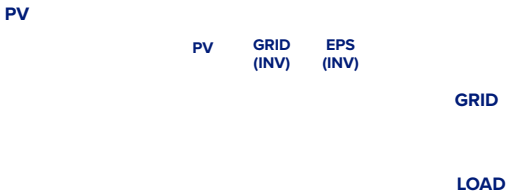


Q.SAVE MATEBOX-G3-1P

For the new Q.HOME+ESS HYB-G3-1P, we get rid of the complicated wiring work by laying all the wires in the Q.SAVE MATEBOX-G3-1P. All you need to do is just to install one module on top of another, and connect all the cables which are already well sorted in the Q.SAVE MATEBOX-G3-1P in different ports.







PV		
Max. input voltage	[V]	600
Max. short circuit current (input A / input B)	[A]	18 / 18
BATTERY		
Battery voltage range	[V]	80 - 480
Max. charge / discharge current	[A]	30
GRID (INV)		
Rated voltage	[V]	220 / 230 / 240
Rated frequency	[Hz]	50 / 60
Max. apparent input / output power	[kVA]	7.5
Max. on-grid current	[A]	32.6
EPS / OFF-GRID (INV)		
Rated voltage	[V]	230
Rated frequency	[Hz]	50 / 60
Rated power	[kVA]	7.5
Rated current	[A]	32.6
GRID		
Rated grid voltage	[V]	220 / 230 / 240
Rated frequency	[Hz]	50 / 60
Max. input / output current	[A]	60
LOAD		
Rated grid voltage	[V]	220 / 230 / 240
Rated frequency	[Hz]	50 / 60
Max. input / output current	[A]	60
ENVIRONMENT LIMIT		
Protection degree		IP54
Protection class		Class I
Operating temperature range	[°C]	−35 - +60
Storage temperature	[°C]	−40 - +70
Relative humidity	[%]	0 - 100 (non-condensing)
Max. operation altitude	[m]	3000
GENERAL DATA		
Dimensions (W × H × D)	[mm]	482 × 437 × 185
Weight	[kg]	10.5
Over voltage category (OVC)		III (AC) / II (DC)
Cooling concept		Natural
Warranty	[Year]	10

Q.SAVE-G3

		Q.SAVE-G3 X.X kWh			
		3.0	6.0	9.0	12.0
SYSTEM DATA					
System Components		• 1x Q.SAVE BMS-G3 • 1x Q.SAVE BAT-G3	• 1x Q.SAVE BMS-G3 • 2x Q.SAVE BAT-G3	• 1x Q.SAVE BMS-G3 • 3x Q.SAVE BAT-G3	• 1x Q.SAVE BMS-G3 • 4x Q.SAVE BAT-G3
Usable energy	[kWh]	2.8	5.5	8.3	11.0
Total energy	[kWh]	3.1	6.1	9.2	12.3
Battery type		LFP (LiFePO4)			
Nominal voltage	[V]	102.4	204.8	307.2	409.6
Operating voltage range	[V]	90 - 116	180 - 232	270 - 348	360 - 464
Max. charge / discharge power	[kW]	3.1	6.1	9.2	12.3
Max. charge / discharge current	[A]	30			
Rated charge / discharge power	[kW]	2.55	5.1	7.65	10.2
Rated charge / discharge current	[A]	25			
Faradic charge efficiency	[%]	99			
Battery roundtrip efficiency	[%]	95			
Max. Depth Of Discharge (DOD)	[%]	90			
Cycle life [@90 % DOD]		6000 cycles			
ENVIRONMENT LIMIT					
Protection degree		IP65			
Protection class		Class I			
Operating temperature range	[°C]	–30 to 50			
Relative humidity	[%]	0 - 100 (non-condensing)			
Storage temperature	[°C]	0 to 40 (1 year)			
Max. operation altitude	[m]	3000			
COMMUNICATION AND USER INTERFACE					
BMS / Inverter / Battery module		RS485 / CAN 2.0			
BMS LED indicator		SOC: 4 LED (25 %, 50 %, 75 %, 100 %); Status: 1 LED (working mode)			
System switch (ON / OFF)		Power button, DC-Breaker			
COMPLIANCE					
Safety		VDE 2510-50 / EN 62619			
EMC		EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 / EN 61000-6-4 / EN 61000-3-2 / EN 61000-3-3 / EN 61000-3-11 / EN 61000-3-12			
UN number		UN 3480			
Hazardous materials classification		Class 9			
Transport testing requirement		UN38.3			
GENERAL DATA					
Over voltage category (OVC)		II (DC)			
Cooling concept		Natural convection			
Reverse connect protection		Yes			
Warranty	[Year]	10*			
Q.SAVE BMS-G3					
Dimensions (W × H × D)	[mm]	482 × 173 × 153			
Weight	[kg]	7.5			
Q.SAVE BAT-G3					
Dimensions (W × H × D)	[mm]	482 × 471 × 153			
Weight	[kg]	34.5			

CONFIGURATIONS (SUGGESTED) **

* See Warranty Terms

** Installation instructions must be followed. For more installation configurations, please refer to the installation manual and the technical documentation or contact our technical service department for further information on approved installation and use of this product.

Q.SAVE-G3 3.0 kWh	Q.SAVE-G3 6.0 kWh
Q.SAVE-G3 9.0 kWh	Q.SAVE-G3 12.0 kWh

Specifications subject to technical changes. © Qcells Q.HOME+_ESS_HYB-G3-IP_2026-06_Rev07_EN