


Beta RHI (3-5)K-48ES	Main Features
	<ul style="list-style-type: none"> • Smart hybrid PV converters. • Double MPPT - 3K, 3.6K, 4.6K, 5K. • Off-grid backup function. • Export Control. • UPS function. • Intelligent EMS function. • Multiple protection functions. • CAN, RS485, WIFI / LAN / GPRS (optional).

MODEL	Beta RHI-3K-48ES	Beta RHI-3.6K-48ES	Beta RHI-4.6K-48ES	Beta RHI-5K-48ES
INPUT DC (PV SIDE)				
Maximum DC Input Power (kW)	4	5	6	8
Maximum DC Input Voltage (V)	600			
Nominal DC Voltage (V)	330			
Start-Up Voltage (V)	120			
MPPT Voltage Range (V)	90 - 520			
Maximum Nominal DC Input Current (A / B)	11A+11A			
Maximum Short Circuit Current for each MPPT (A)	17.2+17.2			
MPPT Number / Input Strings Number	2/A:1; B:1			
BATTERY				
Battery Type	Li-ion			
Battery Voltage Range (V)	42 - 58			
Battery Capacity (Ah)	50 - 2000			
Maximum Charging Power (kW)	3			
Maximum Charge / Discharge Current (A)	62.5 / 62.5			
OUTPUT AC (BACK-UP)				
Rated Output Power (kW)	3			
Maximum Transient, Apparent Output Power	4 kVA, 10 sec			
Back-Up Switch Time	< 10 ms			
Operation Phases	Single			
Nominal Grid Voltage (V)	220 / 230 / 240			
Nominal Grid Frequency (Hz)	50 / 60			
Nominal Grid Output Current (A)	13			
THDi	2% (Linear load)			
INPUT AC (GRID SIDE)				
Input Voltage Range (Vac)	180 ~ 270			
Maximum Input Current (A)	23.9			
Frequency Range (Hz)	47 - 52 / 57 - 62			



MODEL	Beta RHI-3K-48ES	Beta RHI-3.6K-48ES	Beta RHI-4.6K-48ES	Beta RHI-5K-48ES
OUTPUT AC (GRID SIDE)				
Nominal Output Power (kW)	3	3.6	4.6	5
Maximum Apparent Output Power (kVA)	3.3	4	4.6	5.5
Nominal Grid Voltage (V)	220 / 230 / 240			
Nominal Grid Frequency (Hz)	50 / 60			
Nominal Grid Output Current (A)	13	15.7	20.9	21.7
Output Current (A)	15.7	17.3	23	23.9
Power Factor	0.8 Leading... 0.8 Lagging			
THDi	< 2%			
EFFICIENCY				
Maximum Efficiency	> 97.5%			
EU Efficiency	> 96.8%			
Maximum Efficiency of Battery Inverting	> 95%			
Maximum Efficiency of Battery Charging	> 95%			
PROTECTION				
Ground Fault Monitoring	Integrated			
Residual Current Monitoring Unit	Integrated			
AFCI (DC arc-fault circuit protection)	Optional			
DC Reverse-Polarity Protection	Yes			
Protection Class / Over Voltage Category	I / III			
GENERAL DATA				
Dimensions (mm)	333W*505H*249D			
Weight (kg)	17			
Operating Ambient Temperature Range	-25 ~ 60°C			
Ingress Protection / Pollution Degree	IP65 / PD3			
Topology	High frequency isolation (for battery)			
Noise Emission (typical)	< 20 dBA			
Cooling Concept	Natural convection			
Maximum Operation Altitude	2000 m			
Projected Useful Life	> 20 years			
STANDARDS				
Grid Connection Standard	EN50438, G98, G99, AS4777.2:2015, VDE0126-1-1, IEC61727, VDE N4105			
Safety / EMC Standard	IEC62040-1, IEC62109-1/-2, AS3100, NB/T 32004, EN61000-6-2, EN61000-6-3			
FEATURES				
DC Connection	MC4			
AC Connection	Quick Connector			
Display	7.0" LCD color screen display			
Communication Connections	CAN / RS485 / WiFi / GPRS optional			
Warranty	5 / 10 / 15 / 20 years			

Product specifications are subject to change without further notice.

