



● Hybrid Storage Inverter

● River-Hybrid series

● RH3048D / RH4048D / RH5048D

FEATURE

● **Excellent Output Capability**

10% over power support for 10s
Capable of being grid-interactive or grid-independent
Hybrid input with PV and battery for safety output

● **UPS Function Available**

UPS function with 10 ms automatic switchover
Enhanced dynamic MPPT algorithm to make sure accurate and real-time MPP tracking.

● **Intelligent Monitoring, User Friendly**

Firmware can be upgraded via USB flash disc.
Easy connector for GPRS or WIF module. Remotely monitoring system anytime and anywhere through web portal or mobile APP .



Bottom View

Inverter	RH3048D	RH4048D	HEP5048D
Input (DC)			
Max. DC Input Power [W]	4600w/2300w		5600w/2800w
Max. DC Voltage [V]	550	550V	550V
Operating MPPT Voltage Range [V]	100-500	100-500	100-500
Operating MPPT Voltage Range [V]	210-440	230-440	255-440
Star Up Voltage/Initial Feeding Voltage [V]	70/150	70/150	70/150
Turn off Voltage [V]	60	60	60
Max. DC Current per Tracker [A]		12	
Number of independent MPP inputs/strings per MPP input		2/1	
Max. Power per Tracker [W]	2000	2500	3000
Output(AC)			
Rated power[W]	3000	4000	5000
Max. AC apparent power[AV]	3000	4000	5000
Nominal AC voltage range[V]	187 - 270	187 - 270	187 - 270
Nominal Frequency [Hz]*	50 / 60	50 / 60	50 / 60
Frequency Range [Hz]	45 - 55 / 55 - 65	45 - 55 / 55 - 65	45 - 55 / 55 - 65
Max. AC Current [A]	17.5	22	25
Power Factor	0.9i - 0.9c	0.9i - 0.9c	0.9i - 0.9c
Total Harmonic Distortion (THD)	<3%	<3%	<3%
Efficiency			
Max. Efficiency	97.60%	97.60%	97.60%
Euro Efficiency	97%	97%	97%
Max. Battery Charging/Battery Discharging	94.3%/94%	94.3%/94%	94.3%/94%
MPPT Efficiency	99.9%	99.9%	99.9%
Loss at Standby / Loss at Night	<5W / <0W	<5W / <0W	<5W / <0W
Battery			
Battery Type	Li-ion , Lead-acid		
Nominal Battery Voltage[V]	48		
Battery voltage range[V]	38-60		
Max. Charge/Discharge Power[W]	3000/3000	4000/4000	4200/5000
Max. Charge/Discharge Current[A]	60/60	80/80	80/100
BMS Communication Port	CAN2.0 / RS485		
Protective devices			
Array ground insulation resistance monitoring	Yes		
Ground fault monitoring/grid monitoring	Yes		
Array polarity reverse protection	Yes		
All-pole sensitive residual current monitoring unit	Yes		
Anti-island protection	yes		
Surge protection	Yes		
Protection Class	I		
Overvoltage Category	PV II / Mains III		
General data			
Dimensions(W/H/D)[mm]	446*420*215	446*420*215	446*420*215
Weight of inverter[Kg]	22	24	25
Battery/PV/AC connection	Fastening screw		
Mounting	Wall bracket		
Features			
Display	LCD, CapSense key		
Interface: Speedwire/Webconnect	RS485/Digital IO		
Operating temperature range	-25 ~ +60, derating when temperature>45 °C		
Noise emission[dB]	<35		
Topology	High frequency isolation		
Cooling method	Natural Convection		
Degree of protection inverter/battery section	IP65		
Max. Altitude (above sea level) [m]	<2000		
Maximum permissible value for relative humidity	0 - 95%, non condensing		
Certificates and approvals	AS 4777.2, C10/11, CE, CEI 0-21, EN 50549, G99, DIN EN 62109, IEC 62109, RD1699, VDE-AR-N 4105, VDE0126-1-1, IEC 61727, IEC 62116R-N 4105, VDE0126-1-1, IEC 61727, IEC 62116		