Rahvolt

Energy Storage Solution

Intelligent energy storage leader

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About Rahvolt

Rahvolt is a reputable Chinese Inverter and Storage Battery brand. We are on our way to become a world-renowned brand in Solar Industry.

Our employees are not just engineers, sales professionals or production experts. They are revolution aries, giving their best to spread and implement the idea of energy for every body. That's why they are our biggest assets and that's why they are awarded with more than just a satisfying career, but also with the knowledge that they are contributing to an important change of the world.

The solar revolution is going global, so it's important that it is led by an internationally experienced management team. Their expertise in running big multinational companies allows them to draw out the synergy of cooperation between different departments, from Research & Development and Operations to Sales and Marketing.

It is not a coincidence that Rahvolt stands for everybody's right to access to solar power. Giving power to everybody is something our management believes in strongly. We are a company that not only respects every individual in our ranks, but also encourages the culture of free exchange of ideas and initiatives.

Single Phase String Inverters 1 to 2.5 kW

RV S-G2 Series

RV1000-S-G2 / RV1500-S-G2
RV2000-S-G2 / RV2500-S-G2

Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Rahvolt apps
- Compact wall mount design

Reliable

- International quality standards
- Integrated DC switch
- IP66 rated design for outdoor use

User-friendly

- 16 A input current, compatible with bifacial and large size PV modules
- Optional AC Power Supply
- Shadow Optimization Management System
- Support anti-backflow function

RV S-G2 Series

Model:	RV1000-S-G2	RV1500-S-G2	RV2000-S-G2	RV2500-S-G2
PV Input				
Max. PV Array Power	1500 Wp STC	2250 Wp STC	3000 Wp STC	3750 Wp STC
Max. Input Voltage	600 V			
Rated Input Voltage	365 V			
MPPT Operating Voltage Range	65 V ~ 560 V			
Start-up Voltage	100 V			
Max. Operating Input Current	16 A			
Max. Short-circuit Current	24 A			
No.of MPP Trackers	1			
No.of Strings per MPP Tracker	1			
AC Output				
Rated Output Power	1000 W	1500 W	2000 W	2500 W
Rated Apparent Power	1000 VA	1500 VA	2000 VA	2500 VA
Max. Apparent Power	1100 VA	1650 VA	2200 VA	2750 VA
Rated AC Voltage	220 V / 230 V / 240 V			
AC Voltage Range	180 V ~ 295 V			
AC Grid Frequency / Range	50 Hz / 45 Hz to 55 Hz, 60 Hz / 55 Hz to 65 Hz			
Max. Output Current	5 A	7.5 A	10 A	12.5 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)			
Grid Connection	1-Phase			
Max. Total Harmonic Distortion (THDi)	≤ 3 %			
Efficiency				
Max. Efficiency	97.60%			
European Efficiency	97.10%			
Protection				
DC Switch	Yes			
Anti-islanding Protection	Yes			
DC Reverse Polarity Protection	Yes			
AC Short-circuit Protection	Yes			
DC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1			
AC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1			
Residual-current Monitoring Unit	Yes			
Ground Fault Monitoring	Yes			
Grid Monitoring	Yes			
Gerneral Data				
Dimensions (W x H x D)	368 x 325 x 145 mm			
Weight	9.5 kg			
Operating Temperature Range	-25 ~ + 60 °C			
Self-consumption (at night)	<5.5 W			
Topology	Transformerless			
Cooling	Natural Convection			
Ingress Proction	IP66			
Climatic Category	Class 4K4H according to IEC 60721-3-4			
Relative Humidity	0~100%			
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)			
DC Connection	Plug-in Connector			
AC Connection	Plug-in Connector			
Mounting Type	Wall-mount Bracket			
Display	LED Indicator + APP			
Communication Interface	Wi-Fi / 4G / RS485 (Optional)			
Certificates and Approvals (more available on request)	CE, IEC62109, IEC61000, AS/NZS 4777, EN50549, VFR 2014 & UTE C15-712-1, CEI 0-21, C10/C11, NBR16149, IEC61727, IEC62116, IEC61683			

Single Phase String Inverters 3 to 6 kW

RV S-G2 Series

RV3000-S-G2 / RV3680-S-G2
RV4000-S-G2 / RV5000-S-G2
RV6000-S-G2

Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Rahvolt apps
- Compact wall mount design

Reliable

- International quality standards
- Integrated DC switch
- IP66 rated design for outdoor use

User-friendly

- 16 A input current, compatible with bifacial and large size PV modules
- Optional AC Power Supply
- Support anti-backflow function
- 2 MPPT for flexible PV array design
- Shadow Optimization Management System

RV S-G2 Series

Model:	RV3000 -S-G2	RV3680 -S-G2	RV4000 -S-G2	RV5000 -S-G2	RV6000 -S-G2
PV Input					
Max. PV Array Power	4500 Wp STC	5520 Wp STC	6000 Wp STC	7500 Wp STC	9000 Wp STC
Max. Input Voltage	600 V				
Rated Input Voltage	365 V				
MPPT Operating Voltage Range	65 V ~ 560 V				
Start-up Voltage	100 V				
Max. Operating Input Current	16 A				
Max. Short-circuit Current	24 A				
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1				
AC Output					
Rated Output Power	3000 W	3680 W	4000 W	5000 W	6000 W
Rated Apparent Power	3000 VA	3680 VA	4000 VA	5000 VA	6000 VA
Max. Apparent Power	3300 VA	3680 VA	4400 VA	5500 VA	6600 VA
Rated AC Voltage	220 V / 230 V / 240 V				
AC Voltage Range	180 V ~ 295 V				
AC Grid Frequency / Range	50 Hz / 45 Hz to 55 Hz, 60 Hz / 55 Hz to 65 Hz				
Max. Output Current	15 A	16 A	20 A	25 A	30 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)				
Grid Connection	1-Phase				
Max. Total Harmonic Distortion (THDi)	≤ 3 %				
Efficiency					
Max. Efficiency	97.80%				
European Efficiency	97.50%				
Protection					
DC Switch	Yes				
Anti-islanding Protection	Yes				
DC Reverse Polarity Protection	Yes				
AC Short-circuit Protection	Yes				
DC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1				
AC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1				
Residual-current Monitoring Unit	Yes				
Ground Fault Monitoring	Yes				
Grid Monitoring	Yes				
Gerneral Data					
Dimensions (W x H x D)	368 x 325 x 145 mm				
Weight	9.5 kg				
Operating Temperature Range	-25 ~ + 60 °C				
Self-consumption (at night)	<5.5 W				
Topology	Transformerless				
Cooling	Natural Convection				
Ingress Proction	IP66				
Climatic Category	Class 4K4H according to IEC 60721-3-4				
Relative Humidity	0~100%				
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)				
DC Connection	Plug-in Connector				
AC Connection	Plug-in Connector				
Mounting Type	Wall-mount Bracket				
Display	LED Indicator + APP				
Communication Interface	Wi-Fi / 4G / RS485 (Optional)				
Certificates and Approvals (more available on request)	AS/NZS 4777.2, IEC 62109-1/2, IEC 61727, IEC 62116, NB/T32004				

3-Phase String Inverters 3 to 10 kW

RV LT-G2 Pro Series

RV 3K-LT-G2 Pro / RV 4K-LT-G2 Pro

RV 5K-LT-G2 Pro / RV 6K-LT-G2 Pro

RV 8K-LT-G2 Pro / RV 10K-LT-G2 Pro

Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Rahvolt apps
- Compact wall mount design

Reliable

- International quality standards
- 150 % PV array oversizing for higher yields
- IP66 rated design for outdoor use

User-friendly

- Max.20 A input current, ideal for bifacial and large size PV modules
- User friendly app interface
- Wide MPP voltage range 150V-1000V
- Shadow Optimization Management System

RV LT-G2 Pro Series

Model:	RV 3K-LT -G2 Pro	RV 4K-LT -G2 Pro	RV 5K-LT -G2 Pro	RV 6K-LT -G2 Pro	RV 8K-LT -G2 Pro	RV 10K-LT -G2 Pro
PV Input						
Max. PV Array Power	4500 Wp STC	6000 Wp STC	7500 Wp STC	9000 Wp STC	12000 Wp STC	15000 Wp STC
Max. Input Voltage	1100 V					
Rated Input Voltage	625 V					
MPPT Operating Voltage Range	155 V ~ 1000 V					
Start-up Voltage	180 V					
Max. Operating Input Current	16 A / 16 A	16 A / 16 A	16 A / 16 A	16 A / 16 A	20 A / 16 A	20 A / 16 A
Max. Short-circuit Current	25 A / 25 A	25 A / 25 A	25 A / 25 A	25 A / 25 A	30 A / 25 A	30 A / 25 A
No.of MPP Trackers	2					
No.of Strings per MPP Tracker	A:1, B:1					
AC Output						
Rated Output Power	3000 W	4000 W	5000 W	6000 W	8000 W	10000 W
Rated Apparent Power	3000 VA	4000 VA	5000 VA	6000 VA	8000 VA	10000 VA
Max. Apparent Power	3300 VA	4400 VA	5500 VA	6600 VA	8800 VA	11000 VA
Rated AC Voltage	220 V / 380 V, 230 V /400 V, 240 V /415 V					
AC Voltage Range	160 V ~300 V					
AC Grid Frequency / Range	50 Hz / 45 Hz to 55 Hz, 60 Hz / 55 Hz to 65 Hz					
Max. Output Current	4.8 A	6.4 A	8.0 A	9.6 A	12.8A	16A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)					
Grid Connection	3-Phase / 3L-N-PE					
Max. Total Harmonic Distortion (THDi)	≤ 3 %					
Efficiency						
Max. Efficiency	98.30%	98.30%	98.30%	98.30%	98.60%	98.60%
European Efficiency	97.90%	97.90%	97.90%	97.90%	98.20%	98.20%
Protection						
DC Switch	Yes					
Anti-islanding Protection	Yes					
DC Reverse Polarity Protection	Yes					
AC Short-circuit Protection	Yes					
DC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1					
AC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1					
Residual-current Monitoring Unit	Yes					
Ground Fault Monitoring	Yes					
Grid Monitoring	Yes					
Gerneral Data						
Dimensions (W x H x D)	503 x 435 x 183 mm					
Weight	15 kg	15 kg	15 kg	15 kg	17.3 kg	17.3 kg
Operating Temperature Range	-25 ~ + 60 °C					
Self-consumption (at night)	<5.5 W					
Topology	Transformerless					
Cooling	Natural Convection					
Ingress Proction	IP66					
Climatic Category	Class 4K4H according to IEC 60721-3-4					
Relative Humidity	0~100%					
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)					
DC Connection	Plug-in Connector					
AC Connection	Plug-in Connector					
Mounting Type	Wall-mount Bracket					
Display	LED Indicator + APP					
Communication Interface	Wi-Fi / 4G / RS485 (Optional)					
Certificates and Approvals (more available on request)	CE, EN50549,G98/99,VDE-AR-N4105, AS/NZS 4777,C10/C11, VFR 2014 & UTE C15, IEC62109, IEC62116, IEC61727, IEC61683, IEC60068, IEC61000,NB/T 32004					

3-Phase String Inverters 12 to 20 kW

RV LT-G2 Pro Series

RV 12K-LT-G2 Pro / RV 13K-LT-G2 Pro
RV 15K-LT-G2 Pro / RV 17K-LT-G2 Pro
RV 20K-LT-G2 Pro

Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Rahvolt apps
- Compact wall mount design

Reliable

- International quality standards
- 150 % PV array oversizing for higher yields
- IP66 rated design for outdoor use

User-friendly

- 20 A input current, ideal for bifacial and large size PV modules
- User friendly app interface
- Wide MPP voltage range 150V-1000V
- Shadow Optimization Management System

RV LT-G2 Pro Series

Model:	RV 12K-LT -G2 Pro	RV 13K-LT -G2 Pro	RV 15K-LT -G2 Pro	RV 17K-LT -G2 Pro	RV 20K-LT -G2 Pro
PV Input					
Max. PV Array Power	18000 Wp STC	19500 Wp STC	22500 Wp STC	25500 Wp STC	30000 Wp STC
Max. Input Voltage	1100 V				
Rated Input Voltage	625 V				
MPPT Operating Voltage Range	155 V ~ 1000 V				
Start-up Voltage	180 V				
Max. Operating Input Current	32 A / 20 A	32 A / 20 A	32 A / 20 A	32 A / 32 A	32 A / 32 A
Max. Short-circuit Current	48 A / 30 A	48 A / 30 A	48 A / 30A	48 A / 48 A	48 A / 48 A
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	A:2, B:1	A:2, B:1	A:2, B:1	A:2, B:2	A:2, B:2
AC Output					
Rated Output Power	12000 W	13000 W	15000 W	17000 W	20000 W
Rated Apparent Power	12000 VA	13000 VA	15000 VA	17000 VA	20000 VA
Max. Apparent Power	13200 VA	14300 VA	16500 VA	18700 VA	22000 VA
Rated AC Voltage	220 V / 380 V, 230 V / 400 V, 240 V / 415 V				
AC Voltage Range	160 V ~ 300 V				
AC Grid Frequency / Range	50 Hz / 45 Hz to 55 Hz, 60 Hz / 55 Hz to 65 Hz				
Max. Output Current	19.1 A	20.7 A	24.0 A	27.1 A	31.9A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)				
Grid Connection	3-Phase / 3L-N-PE				
Max. Total Harmonic Distortion (THDi)	≤ 3 %				
Efficiency					
Max. Efficiency	98.60%				
European Efficiency	98.20%				
Protection					
DC Switch	Yes				
Anti-islanding Protection	Yes				
DC Reverse Polarity Protection	Yes				
AC Short-circuit Protection	Yes				
DC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1				
AC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1				
Residual-current Monitoring Unit	Yes				
Ground Fault Monitoring	Yes				
Grid Monitoring	Yes				
Gerneral Data					
Dimensions (W x H x D)	503 x 435 x 183 mm				
Weight	17.3 kg	17.3 kg	17.3 kg	18.6 kg	18.6 kg
Operating Temperature Range	-25 ~ + 60 °C				
Self-consumption (at night)	<5.5 W				
Topology	Transformerless				
Cooling	Natural Convection				
Ingress Proction	IP66				
Climatic Category	Class 4K4H according to IEC 60721-3-4				
Relative Humidity	0~100%				
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)				
DC Connection	Plug-in Connector				
AC Connection	Plug-in Connector				
Mounting Type	Wall-mount Bracket				
Display	LED Indicator + APP				
Communication Interface	Wi-Fi / 4G / RS485 (Optional)				
Certificates and Approvals (more available on request)	CE, EN50549,IEC62109,IEC62116,IEC61727,IEC61683,IEC60068,IEC61000,AS/NZS4777,C10/C11				

3-Phase String Inverters 25 to 40 kW

RV LT-G3 Series

RV 25K-LT-G3 / RV 27K-LT-G3
RV 30K-LT-G3 / RV 33K-LT-G3
RV 36K-LT-G3 / RV 40K-LT-G3

Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Rahvolt apps
- Compact wall mount design

Reliable

- International quality standards
- IP66 rated design for outdoor use
- 150 % PV array oversizing for higher yields

User-friendly

- 20A input current, ideal for bifacial and large size PV modules
- 3 MPPTs for flexible PV array design
- Wide MPP voltage range 180V-1000V
- Shadow Optimization Management System

RV LT-G3 Series

Model:	RV 25K-LT-G3	RV 27K-LT-G3	RV 30K-LT-G3	RV 33K-LT-G3	RV 36K-LT-G3	RV 40K-LT-G3
PV Input						
Max. PV Array Power (Wp STC)	37500	40500	45000	49500	54000	60000
Max. Input Voltage	1100 V					
Rated Input Voltage	625 V					
MPPT Operating Voltage Range	185 V ~ 1000 V					
Start-up Voltage	200 V					
Max. Operating Input Current	32A/32A/32A	32A/32A/32A	32A/32A/32A	32A/32A/40A	32A/32A/40A	32A/32A/40A
Max. Short-circuit Current	48A/48A/48A	48A/48A/48A	48A/48A/48A	48A/48A/60A	48A/48A/60A	48A/48A/60A
No.of MPP Trackers	3					
No.of Strings per MPP Tracker	A:2, B:2, C:2					
AC Output						
Rated Output Power	25000 W	27000 W	30000 W	33000 W	36000 W	40000 W
Rated Apparent Power	25000 VA	27000 VA	30000 VA	33000 VA	36000 VA	40000 VA
Max. Apparent Power	27500 VA	29700 VA	33000 VA	36300 VA	39600 VA	44000 VA
Rated AC Voltage	220 V / 380 V ; 230 V /400 V ; 240 V / 415 V					
AC Voltage Range	180 V ~ 305 V / 312 V ~ 528 V					
AC Grid Frequency / Range	50 Hz / 45 Hz to 55 Hz, 60 Hz / 55 Hz to 65 Hz					
Max. Output Current	39.3 A	43 A	47.8 A	52.6 A	57.4 A	63.8 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)					
Grid Connection	3-Phase / 3L-N-PE					
Max. Total Harmonic Distortion (THDi)	≤ 3 %					
Efficiency						
Max. Efficiency	98.40%					
European Efficiency	98.20%					
Protection						
DC Switch	Yes					
Anti-islanding Protection	Yes					
DC Reverse Polarity Protection	Yes					
AC Short-circuit Protection	Yes					
DC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1					
AC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1					
Residual-current Monitoring Unit	Yes					
Ground Fault Monitoring	Yes					
Grid Monitoring	Yes					
Gerneral Data						
Dimensions (W x H x D)	543 x 520 x 235 mm					
Weight	29 kg	29 kg	29 kg	30 kg	30 kg	30 kg
Operating Temperature Range	-25 ~ + 60 °C					
Self-consumption (at night)	<5.5 W					
Topology	Transformerless					
Cooling	Active cooling					
Ingress Proction	IP66					
Climatic Category	Class 4K4H					
Relative Humidity	0~100%					
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)					
DC Connection	Plug-in Connector					
AC Connection	Plug-in Connector					
Mounting Type	Wall-mount Bracket					
Display	LED Indicator + APP					
Communication Interface	Wi-Fi / 4G / RS485 (Optional)					
Certificates and Approvals (more available on request)	CE, EN50549,IEC62109,IEC62116,IEC61727,IEC61000,NB/T 32004					

3-Phase String Inverters 50 to 60 kW

RV LT-G3 Series

RV 50KN-LT-G3 / RV 60KN-LT-G3

Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Rahvolt apps
- Compact wall mount design

Reliable

- International quality standards
- IP66 rated design for outdoor use
- 150 % PV array oversizing for higher yields

User-friendly

- 40A input current, ideal for bifacial and large size PV modules
- 4 MPPTs for flexible PV array design
- Wide MPP voltage range 200V-1000V
- Shadow Optimization Management System

RV LT-G3 Series

Model:	RV 50KN-LT-G3	RV 60KN-LT-G3
PV Input		
Max. PV Array Power (Wp STC)	75000	90000
Max. Input Voltage	1100 V	
Rated Input Voltage	625 V	
MPPT Operating Voltage Range	205 V ~ 1000 V	
Start-up Voltage	250 V	
Max. Operating Input Current	40 A / 32 A /32 A / 40 A / 32 A	40 A / 32 A / 32 A / 40 A / 32 A
Max. Short-circuit Current	60 A / 48 A / 48 A / 60 A / 48 A	60 A / 48 A / 48 A / 60 A / 48 A
No.of MPP Trackers	5	
No.of Strings per MPP Tracker	2	
AC Output		
Rated Output Power	50000 W	60000 W
Rated Apparent Power	50000 W	60000 W
Max. Apparent Power	55000 VA	66000 VA
Rated AC Voltage	220 V / 380 V ; 230 V /400 V	
AC Voltage Range	180 V ~ 305 V	
AC Grid Frequency / Range	50 Hz / 45 Hz to 55 Hz, 60 Hz / 55 Hz to 65 Hz	
Max. Output Current	83.6 A	95.3 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)	
Grid Connection	3-Phase / 3L-N-PE	
Max. Total Harmonic Distortion (THDi)	≤ 3 %	
Efficiency		
Max. Efficiency	98.60%	
European Efficiency	98.40%	
Protection		
DC Switch	Yes	
Anti-islanding Protection	Yes	
DC Reverse Polarity Protection	Yes	
AC Short-circuit Protection	Yes	
DC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1	
AC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1	
Residual-current Monitoring Unit	Yes	
Ground Fault Monitoring	Yes	
Grid Monitoring	Yes	
Gerneral Data		
Dimensions (W x H x D)	670 x 580 x 270 mm	
Weight	40 kg	
Operating Temperature Range	-30 ~ + 60 °C	
Self-consumption (at night)	<1 W	
Topology	Transformerless	
Cooling	Active cooling	
Ingress Proction	IP66	
Climatic Category	Class 4K4H	
Relative Humidity	0~100%	
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)	
DC Connection	Plug-in Connector	
AC Connection	Plug-in Connector	
Mounting Type	Wall-mount Bracket	
Display	LED Indicator + APP	
Communication Interface	RS485 / 4G / Wi-Fi (Optional)	
Certificates and Approvals (more available on request)	CE, IEC 62109-1/2, NB/T32004	

3-Phase String Inverters 75 to 110 kW

RV LT Series

RV 75K-LT / RV 80K-LT

RV 100K-LT / RV 110K-LT

Safe and Reliable

- TYPE II Surge Protection for DC&AC
- IP66 rated design for outdoor use
- Fuse free design

Higher Yields

- 150% PV array oversizing for higher yields
- 16A input current, ideal for bifacial and large size PV modules
- 10 MPPTs for flexible PV array design for higher yields

User-friendly

- Quick setup and commissioning with Rahvolt Apps
- Support 7*24H monitoring
- String-level Management

RV LT Series

Model:	RV 75K-LT	RV 80K-LT	RV 100K-LT	RV 110K-LT
PV Input				
Max. PV Array Power	112500 Wp STC	120000 Wp STC	150000 Wp STC	165000 Wp STC
Max. Input Voltage	1100 V			
Rated Input Voltage	625 V			
MPPT Operating Voltage Range	205V ~ 1000 V			
Start-up Voltage	250 V			
Max. Operating Input Current	32 A			
Max. Short-circuit Current	48 A			
No.of MPP Trackers	8	8	10	10
No.of Strings per MPP Tracker	2			
AC Output				
Rated Output Power	75000 W	80000 W	100000 W	110000 W
Rated Apparent Power	75000 VA	80000 VA	100000 VA	110000 VA
Max. Apparent Power	75000 VA	88000 VA	110000 VA	121000 VA
Rated AC Voltage	220 V / 380 V, 230 V / 400 V 3L+N+PE			
AC Voltage Range	312 V - 528 V			
AC Grid Frequency / Range	50 Hz / 45 Hz to 55 Hz, 60 Hz / 55 Hz to 65 Hz			
Max. Output Current	114.0 A	127.0 A	158.8 A	174.7 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)			
Grid Connection	3-Phase			
Max. Total Harmonic Distortion (THDi)	≤ 3 %			
Efficiency				
Max. Efficiency	98.60%			
European Efficiency	98.40%			
Protection				
DC Switch	Yes			
Anti-islanding Protection	Yes			
DC Reverse Polarity Protection	Yes			
AC Short-circuit Protection	Yes			
DC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1			
AC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1			
Residual-current Monitoring Unit	Yes			
Ground Fault Monitoring	Yes			
Grid Monitoring	Yes			
Gerneral Data				
Dimensions (W x H x D)	984 x 640 x 330 mm			
Weight	85 kg			
Operating Temperature Range	-25 ~ + 60 °C			
Self-consumption (at night)	<5.5 W			
Topology	Transformerless			
Cooling	Active Cooling			
Ingress Proction	IP66			
Climatic Category	Class 4K4H according to IEC 60721-3-4			
Relative Humidity	0~100%			
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)			
DC Connection	Plug-in Connector			
AC Connection	Plug-in Connector			
Mounting Type	Wall-mount Bracket			
Display	LED Indicator + APP			
Communication Interface	RS485 / 4G / Wi-Fi (Optional)			
Certificates and Approvals (more available on request)	CE, IEC62109, IEC 61727, IEC62116			

Single Phase Hybrid Inverters 3 to 6 kW

RV-H-S2 Series

RV3000H-S2 / RV3680H-S2

RV4000H-S2 / RV5000H-S2

RV6000H-S2

Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Rahvolt apps
- Compact wall mount design

Reliable

- Smart energy management
- UPS capability - power during blackouts
- IP66 rated design for outdoor use

User-friendly

- Online monitoring via Wi-Fi and Rahvolt apps
- User friendly app interface
- Easy to connect - battery and smart meter interfaces
- Shadow Optimization Management System

RV-H-S2 Series

Model:	RV3000H -S2	RV3680H -S2	RV4000H -S2	RV5000H -S2	RV6000H -S2
PV Input					
Max. PV Array Power	5500 Wp STC	6180 Wp STC	6500 Wp STC	7500 Wp STC	9000 Wp STC
Max. Input Voltage	550 V				
Rated Input Voltage	385 V				
MPPT Operating Voltage Range	45 V ~ 530 V				
Max. Operating Input Current	16 A				
Max. Short-circuit Current	20 A				
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1				
Battery Input					
Rated Voltage	48 V /51.2 V				
Battery Voltage Range	40 ~ 60 V				
Max Charging / Discharging Power	5000 W / 5000 W				
Max Charging / Discharging Current	100 A / 100 A				
Cell Type	LFP (LiFePO4)				
AC Output					
Rated Output Power	3000 W	3680 W	4000 W	5000 W	6000 W
Rated Apparent Power	3000 VA	3680 VA	4000 VA	5000 VA	6000 VA
Max. Apparent Power	3000 VA	3680 VA	4000 VA	5000 VA	6000 VA
Rated AC Voltage	220 V / 230 V / 240 V				
AC Voltage Range	180 V ~280 V				
Rated AC Grid Frequency	50 Hz / 45 Hz to 55 Hz, 60 Hz / 55 Hz to 65 Hz				
Max. Output Current	13.6 A	16 A	18.2 A	22.7 A	27.3 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)				
Grid Connection	1-Phase				
Max. Total Harmonic Distortion (THDi)	≤ 3 %				
AC Input					
Rated Grid Voltage	230 V				
Rated grid frequency	50Hz / 60Hz				
Max. Input Apparent Power From Grid	6000 VA				
Max. input current	27.3 A				
Efficiency					
MPPT Efficiency	99.90%				
Max. Efficiency	97.60%				
European Efficiency	97.00%				
Max. Battery To Load Efficiency	94.70%				
EPS / Backup AC Output					
Rated Output Voltage	230 V				
Peak Output Appearant Volatge	7500 VA , 10 s				
Max Switch Time	≤10 ms				
Rated Current / Max Current	21.7 A				
Protection					
DC Switch	Yes				
Anti-islanding Protection	Yes				
DC Reverse Polarity Protection	Yes				
AC Short-circuit Protection	Yes				
DC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1				
AC Output Over-current Protection	Yes				
AC Output Over-voltage Protection	Yes				
Residual-current Monitoring Unit	Yes				
Ground Fault Monitoring	Yes				
General data					
Dimensions (W x H x D)	483 x 455 x 193.5 mm				
Weight	25.1 kg				
Operating Temperature Range	-25 ~ + 60 °C				
Self-consumption (at night)	< 10 W				
Topology	Transformerless				
Cooling	Natural Convection				
Ingress Proction	IP66				
Climatic Category	Class 4K4H according to IEC 60721-3-4				
Relative Humidity	0~100%				
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)				
DC Connection	Plug-in Connector				
AC Connection	Plug-in Connector				
Mounting Type	Wall-mount Bracket				
Display	LED Indicator + APP				
Communication Interface	Wi-Fi / CAN / RS485				

Low Voltage Wall-mount Battery

5 to 10 kWh

RV-LB 5K / RV-LB 10K

RV -LB Series

Model:	RV-LB 5K	RV-LB 10K
System Data		
Cell Type	LiFePO4	LiFePO4
Battery Module	LB51100A	LB51100A
Module Number	1	2
Rated Capacity	5.12 kWh	10.24 kWh
Rated Battery Voltage	51.2 V	51.2 V
Battery Voltage Range	49.8 V - 62.6 V	49.8 V - 62.6 V
Max. Charging / Discharging Current	50 A	100 A
Max. Charging / Discharging Power	2.56 kW	5.12 kW
General Data		
Dimensions (W x H x D)	490 x 150 x 680 mm	640 x 181 x 1017 mm
Pack Weight	57 kg	116 kg
Module Weight	44.5 kg	44.5 kg
Installation Location	Indoor / Outdoor	Indoor / Outdoor
Mounting Type	Floor Stand	Floor Stand / Wall-mount Bracket
Operating Temperature Range	"Charge: 0 ℃ ~ 55 ℃ Discharge: -20 ℃ ~ 55 ℃"	
Storage Temperature Range	-20℃ ~ 55℃	-20℃ ~ 55℃
Cooling	Natural convection	Natural convection
Ingress Proction	IP65	IP65
Relative Humidity	5~95%, non-condensing	5~95%, non-condensing
Max. Operating Altitude	3000m	3000m
Scalability	Max. 8 sets in parallel	Max. 4 sets in parallel
Communication	CAN	
Certification	TUV/IEC 62619/IEC 62040/IEC 61000/UN38.3	
Life Cycle	6000 cycles	

Safety

- LFP safe technology
- All-round BMS protection

Reliable

- IP65 rated design for outdoor use
- High quality cell inside

User-friendly

- Remote upgrade
- Online monitoring via Rahvolt apps

Ultra-thin Low Voltage Power Wall

RV Li-Power 51.2V130Ah

Safety

- 130AH LiFePO4 pack, Ultra-thinWall Mount Design
- Adopt Original New Grade A BYD blade battery pack, Strong and reliable quality

Reliable

- Smart BMS with multiple communication protocol built inside
- Varied Communication: CAN/RS485/Bluetooth

User-friendly

- LED with RGB light display to show battery capacity
- All around protection and unattended operation

Technical Datasheet

Model:	RV Li-Power 51.2V130Ah
Cell Type	LiFePO4
Cell Brand	BYD
Rated Energy	6.656 kWh
Rated Energy	130 Ah
Rated Voltage	56.2 V
Float Charge Voltage	56.0 V
Operating Voltage	49.8 V ~ 58.4 V
Max Continuous Discharge Current	150 A
Max Continuous Charge Current	65 A
Dimensions(W x D x H)	1090 x 685 x 120 mm
Battery Weight	78.6 kg
Terminal	M8 Connector
Installation Location	Indoor
Mounting Type	Wall Mount
Operating Temperature Range	Charge: 0 ~ 50 ℃ Discharge:-10 ℃ ~ 50 ℃
Storage Duration	6 months at 25 ℃
Storage Temperature Range	-20 ℃ ~ 30 ℃
Max. Operating Altitude	1500 m
Cooling	Natural Convection
Protection	Overcharge protection, Overdischarge protection, Over-current protection, Short-circuit protection, Over-temperature protection
Ingress Proction	IP20
Relative Humidity	0~95%,non-condensation
Display	LED Display
Communication	CAN/RS485/Wifi/Bluetooth, Smart BMS with multiple communication protocol built inside
Certification	UN38.3, MSDS, CE, CB, IEC
Life Cycle	8000 cycles

Single Phase Off Grid ESS

DOVA 5000N

System definition

Model	Inverter power	Size	Weight
DOVA-5BY	5KWH	585*360*150MM	49KG
DOVA-5I	5KW	585*360*110MM	13.5KG

Environmental requirements

Project	Parameter	Unit
Operation Temperature	0-40	℃
Storage Temperature	-15~60	℃
Working Humidity	10~85	%RH
Storage Humidity	10~85	%RH
Working altitude	≤2000	m

Technical Parameter

Module	Item	Value	Comments
Input Voltage	Main topology	L+N+PE	
	Nominal voltage	220VAC	208/220/230/240VAC
	Input Voltage Range	90~280VAC	Settable
	Input Low Loss	154VAC（default) Settable:90-154	Appliance mode
		185VAC(default) Settable:170-200	UPS mode
	Input Low Comeback	Low Loss voltage +9V	
	Input High Loss	264VAC（default) Settable:264-280	Appliance mode
		264VAC	UPS mode
	Input High comeback	High Loss voltage-9v	
Input Frequency	Nominal Frequency	50.0Hz/60.0Hz	
	Frequency Range	40/70Hz	
	Freq.Low loss/Comeback	40/43.5Hz@50Hz(UPS mode) 40/40.5Hz@50Hz(APP mode)	
		50/53.5Hz@60Hz(UPS mode) 50/50.5Hz@60Hz(APP mode)	
	Freq.High loss/Comeback	60/56.5Hz@50Hz(UPS mode) 70/69.5Hz@50Hz(APP mode)	
		70/66.5Hz@60Hz(UPS mode) 70/69.5Hz@60Hz(APP mode)	
Input current	Nominal Current(RMS)	22.7A	Vrms=220V Line mode with 100% capacity. Charger not included.
	Max Current(RMS)	40A	Depends on the breaker

Charger

Module	Item	Value	Comments
Charger(linemode)	Charging voltage	FV MODE:54 V Settable:53.2~55.6VCV MODE:56.4V Settable:56~58V	
	Temperature Compensation	No	
	Charging Current	1~80A	Settable
	Default Charging Current	60A	
	Charging mode	Two/Three/Auto Settable	
	Charge Voltage Accuracy	±5%	Calibrated by RS232
Charger(PV)	PV charging method	MPPT	
	PV Maximum Input Power	5500W	
	Efficiency	99.5%max	
	Battery Voltage Accuracy	±0.3%	
	PV Voltage Accuracy	±2V	
	MPPT Tracking Range	120-430VDC	
	Recommended PVconfiguration voltage	MPPT tracking voltage: 300-340V open circuit voltage: 370-430V	
	Max PV voltage	450Vdc	
	Max PV current	80A	
Max charging current		80A(Maximum Settable)Default:60A	Settable

All in one Balcony power system
400 - 1000W

RV-A-S series

RV0400/1250A-S / RV0600/1250A-S
RV0800/1250A-S / RV1000/1250A-S
RV0400/2500A-S / RV0600/2500A-S
RV0800/2500A-S / RV1000/2500A-S

Easy-to-install

- Quick & easy-to-install with basic tools
- Stable, anti-tipping design, no additional accessories required
- Compact wall mount design

Reliable

- BMS protection
- Low voltage system
- High integrated design
- LiFePO4 safe battery technology

User-friendly

- Set, adjust and monitor with APP
- LCD interface
- Able to work under-15℃
- 1.3kWh&2.4kWh Lithium battery optional

RV-A-S Series

Model:	RV0400/ 1250A-S	RV0600/ 1250A-S	RV0800/ 1250A-S	RV1000/ 1250A-S	RV0400/ 2500A-S	RV0600/ 2500A-S	RV0800/ 2500A-S	RV01000/ 2500A-S
PV Input								
Max. PV Array Power (Wp STC)	800	1600	1600	1600	800	1600	1600	1600
Max. Input Voltage	50 V							
Rated Input Voltage	45 V							
MPPT Operating Voltage Range	21 ~ 50 V							
Start-up Voltage	30 V							
Max. Operating Input Current	26 A							
Max. Short-circuit Current	39 A							
No.of MPP Trackers	1	2	2	2	1	2	2	2
No.of Strings per MPP Tracker	2							
AC Output								
Rated Output Power	400 W	600 W	800 W	1000 W	400 W	600 W	800 W	1000 W
Rated Apparent Power	400 VA	600 VA	800 VA	1000 VA	400 VA	600 VA	800 VA	1000 VA
Max. Apparent Power	400 VA	600 VA	800 VA	1000 VA	400 VA	600 VA	800 VA	1000 VA
Rated AC Voltage	220V / 230V / 240V							
AC Voltage Range	154 V - 276 V							
AC Grid Frequency / Range	50 Hz / 45 Hz to 55 Hz, 60 Hz / 55 Hz to 65 Hz							
Max. Output Current	1.8 A	2.6 A	3.5 A	4.4 A	1.8 A	2.6 A	3.5 A	4.4 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)							
Grid Connection	1-Phase							
Max. Total Harmonic Distortion (THDi)	≤ 3 %							
Battery Input								
Rated Battery Energy	1.3 kWh	1.3 kWh	1.3 kWh	1.3 kWh	2.4 kWh	2.4 kWh	2.4 kWh	2.4 kWh
Rated Battery Capacity	27 Ah	27 Ah	27 Ah	27 Ah	50 Ah	50 Ah	50 Ah	50 Ah
Cell Type	LFP (LiFePO4)							
AC Input								
Rated AC Voltage	220V / 230V / 240V							
AC Grid Frequency	50 Hz / 60 Hz							
Max Grid Input Power	1000 W							
Max Grid Input Current	4.4 A							
Efficiency								
Max. Efficiency	99.00%							
Max. Battery load efficiency	92.00%							
General data								
Dimensions (W x H x D)	600 x 385 x 282 mm							
Weight	24kg	24kg	24kg	24kg	36kg	36kg	36kg	36kg
Operating Temperature Range	-25 ~ + 45 °C							
Self-consumption (at night)	<1 W							
Topology	Transformerless							
Cooling	Forced Air Cooling							
Ingress Proction	IP54							
Climatic Category	Class 4K4H according to IEC 60721-3-4							
Relative Humidity	0~100%							
Max. Operating Altitude	3000 m							
Mounting Type	Floor Stand							
Display	LED Indicator + APP							
Communication Interface	LCD screen, APP , WIFI							
Certificates and Approvals (more available on request)	IEC62619, UN 38.3 ,IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 61000-3-2/-3 , IEC/EN 62109-1, IEC/EN 62109-2							

3-Phase hybrid inverters 5 to 6 kW

RVKH-T2 Series

RV05kH-T2 / RV06kH-T2

Easy-to-install

- Convenient battery and ammeter Interfaces
- Quick setup and commissioning with Rahvolt apps
- Compact wall mount design

Reliable

- Smart energy management
- UPS capability - power during blackouts
- IP66 rated design for outdoor use
- 150% PV array oversizing for higher yields

User-friendly

- Smart set for work mode and battery management
- User friendly app interface
- Max 20A output match 210/182 modules

RVKH-T2 Series

Model:	RV 05kH-T2	RV 06kH-T2
PV Input		
Max. PV Array Power	7500 Wp STC	9000 Wp STC
Max. Input Voltage	1100 V	
Rated Input Voltage	595 V	
MPPT Operating Voltage Range	155 V ~ 950 V	155 V ~ 950 V
Start-up Voltage	180 V	
Max. Operating Input Current	20 A	
Max. Short-circuit Current	30 A	
No.of MPP Trackers	2	
No.of Strings per MPP Tracker	1	
Battery Input		
Battery Voltage Range	120 V ~ 600 V	
Max Charging / Discharging Power	5000 W	6000 W
Max Charging / Discharging Current	30 A	
Cell Type	LFP (LiFePO4)	
AC Output		
Rated Output Power	5000 W	6000 W
Rated Apparent Power	5000 VA	6000 VA
Max. Apparent Power	5000 VA	6000 VA
Rated Output Cureent	7.3 A	8.7 A
Max. Output Cureent	8.0 A	9.6 A
Rated AC Voltage	220 / 380 V, 230 / 400 V, 240 / 415 V	
AC Voltage Range	270 V ~ 480 V / 3L/N/PE	
Rated AC Grid Frequency	50 Hz / 60 Hz	
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)	
Grid Connection	3-Phase	
Max. Total Harmonic Distortion (THDi)	≤ 3 %	
AC Input		
Rated Grid Voltage	3L/N/PE, 220 / 380 V, 230 / 400 V, 240 /415 V	
Rated grid frequency	50Hz / 60Hz	
Max. Input Power From Grid	10000 W	12000 W
Max. input current	8.0 A	9.6 A
Efficiency		
MPPT Efficiency	99.90%	
Max. Efficiency	98%	98.2%
European Efficiency	97.2%	97.5%
Max. Battery To Load Efficiency	94.70%	
EPS / Backup AC Output		
Rated Output Voltage	3L / N / PE, 220 / 380 V, 230 / 400 V, 240 /415 V	
Peak Output Appearant Power	10000 W, 10 s	12000 W, 10 s
Max Switch Time	≤10 ms	
Rated Current (@ 400V)	7.3 A	8.7 A
Protection		
DC Switch	Yes	
Anti-islanding Protection	Yes	
DC Reverse Polarity Protection	Yes	
AC Short-circuit Protection	Yes	
DC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1	
AC Surge Protection	Compatible with TYPE II Protection Class according to EN/IEC 62109-1	
AC Output Over-current Protection	Yes	
AC Output Over-voltage Protection	Yes	
Residual-current Monitoring Unit	Yes	
Ground Fault Monitoring	Yes	
General Data		
Dimensions (W x H x D)	545 mm x 465 mm x 205 mm	
Weight	24.5 kg	
Operating Temperature Range	-25 ~ + 60 °C	
Self-consumption (at night)	< 10 W	
Topology	Transformerless	
Cooling	Natural Convection	
Ingress Proction	IP66	
Climatic Category	Class 4K4H according to IEC 60721-3-4	
Relative Humidity	0~100%	
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)	
DC Connection	Plug-in Connector	
AC Connection	Plug-in Connector	
Mounting Type	Wall-mount Bracket	
Display	LED Indicator + APP	
Communication Interface	Wi-Fi / LAN / CAN / RS485	

3-Phase hybrid inverters 8 to 12 kW

RVKH-T3 Series

RV08kH-T3 / RV10kH-T3
RV12kH-T3

Easy-to-install

- Convenient battery and ammeter Interfaces
- Quick setup and commissioning with Rahvolt apps
- Compact wall mount design

Reliable

- Smart energy management
- UPS capability - power during blackouts
- IP66 rated design for outdoor use
- 150% PV array oversizing for higher yields

User-friendly

- Smart set for work mode and battery management
- User friendly app interface
- Max 16A output match 210/182 modules

RVKH-T3 Series

Model:	RV08kH-T3	RV10kH-T3	RV12kH-T3
PV Input			
Max. PV Array Power	12000 Wp STC	15000 Wp STC	18000 Wp STC
Max. Input Voltage		1100 V	
Rated Input Voltage		595 V	
MPPT Operating Voltage Range	205 V - 950 V	205 V - 950 V	205 V - 950 V
Start-up Voltage		180 V	
Max. Operating Input Current		16 A	
Max. Short-circuit Current		24 A	
No.of MPP Trackers		3	
No.of Strings per MPP Tracker		1	
Battery Input			
Battery Voltage Range		120 V ~ 600 V	
Max Charging / Discharging Power	8000 W	10000 W	12000 W
Max Charging / Discharging Current		30 A	
Cell Type		LFP (LiFePO4)	
AC Output			
Rated Output Power	8000 W	10000 W	12000 W
Rated Apparent Power	8000 VA	10000 VA	12000 VA
Max. Apparent Power	8000 VA	10000 VA	12000 VA
Rated Output Cureent	11.6 A	14.5 A	17.4 A
Max. Output Cureent	12.8 A	16.0 A	19.2 A
Rated AC Voltage		220 / 380 V, 230 / 400 V, 240 / 415 V	
AC Voltage Range		270 V ~ 480 V / 3L/N/PE	
Rated AC Grid Frequency		50 Hz / 60 Hz	
Adjustable Power Factor		~1 (Adjustable from 0.8 Leading to 0.8 Lagging)	
Grid Connection		3-Phase	
Max. Total Harmonic Distortion (THDi)		≤ 3 %	
AC Input			
Rated Grid Voltage		3L/N/PE, 220 / 380 V, 230 / 400 V, 240 /415 V	
Rated grid frequency		50Hz / 60Hz	
Max. Input Power From Grid	16000 W	20000 W	24000 W
Max. input current	23.2 A	29.0 A	34.8 A
Efficiency			
MPPT Efficiency		99.90%	
Max. Efficiency	98.00%	98.40%	98.40%
European Efficiency	97.20%	97.90%	97.90%
Max. Battery To Load Efficiency		94.70%	
EPS / Backup AC Output			
Rated Output Voltage		3L / N / PE, 220 / 380 V, 230 / 400 V, 240 /415 V	
Peak Output Appearant Power	16000 W, 10 s	20000 W, 10 s	24000 W, 10 s
Max Switch Time		≤10 ms	
Rated Current (@ 400V)	11.6 A	14.5 A	17.4 A
Protection			
DC Switch		Yes	
Anti-islanding Protection		Yes	
DC Reverse Polarity Protection		Yes	
AC Short-circuit Protection		Yes	
DC Surge Protection		Compatible with TYPE II Protection Class according to EN/IEC 62109-1	
AC Surge Protection		Compatible with TYPE II Protection Class according to EN/IEC 62109-1	
AC Output Over-current Protection		Yes	
AC Output Over-voltage Protection		Yes	
Residual-current Monitoring Unit		Yes	
Ground Fault Monitoring		Yes	
General Data			
Dimensions (W x H x D)		545 mm x 465 mm x 205 mm	
Weight		26 kg	
Operating Temperature Range		-25 ~ + 60 °C	
Self-consumption (at night)		< 10 W	
Topology		Transformerless	
Cooling		Natural Convection	
Ingress Proction		IP66	
Climatic Category		Class 4K4H according to IEC 60721-3-4	
Relative Humidity		0~100%	
Max. Operating Altitude		4,000 m (13,123 ft.) (Derating above 2000 m)	
DC Connection		Plug-in Connector	
AC Connection		Plug-in Connector	
Mounting Type		Wall-mount Bracket	
Display		LED Indicator + APP	
Communication Interface		Wi-Fi / LAN / CAN / RS485	

High Voltage Stackable Battery

7.5 to 20 kWh

RV-HB G2 Series

RV-HB 075A / RV-HB 100A
RV-HB 125A / RV-HB 150A
RV-HB 175A / RV-HB 200A

Safety

- Steady and anti-dumping design
- Modular design with plug-in connections
- Quick & easy-to-install with basic tools

Reliable

- IP65 rated design
- Cell-level monitoring
- LFP safe technology
- All-round BMS protection

User-friendly

- Online monitoring via Rahvolt apps
- Stackable and Expandable up to 81.92 kWh (supporting 8 modules per unit, 4 units in parallel)

RV-HB G2 Series

Model:	RV-HB 075A	RV-HB 100A	RV-HB 125A	RV-HB 150A	RV-HB 175A	RV-HB 200A
System Data						
Cell Type	LiFePO4					
Battery Module	RV-HB 2.56LG					
Module Quantity	3	4	5	6	7	8
Rated Energy	7.68 kWh	10.24 kWh	12.8 kWh	15.36 kWh	17.92 kW	20.48 kWh
Usable Energy	6.91 kWh	9.21 kWh	11.52 kWh	13.82 kWh	16.12 kWh	18.43 kWh
Rated Voltage(V)	158.6	209.8	261	312.2	363.4	414.6
Operating Voltage(V)	125 - 175.2	165 - 233.6	205 - 292	245 - 350.4	285- 408.8	325 - 467.2
Rated Charging / Discharging Current	25 A / 25 A					
Max.Charging / Discharging Current	30 A / 30 A					
General Data						
Dimensions(W x D x H) (mm)	540*390*600	540*390*730	540*390*860	540*390*990	540*390*1120	540*390*1250
Battery Weight	106.5 kg	137 kg	167.5 kg	198 kg	228.5 kg	259 kg
Module Weight	30.5 kg					
Installation Location	Indoor / Outdoor					
Mounting Type	Floor Mounted					
Operating Temperature Range	"Charge: 0~50 ℃ Discharge:-20 ℃~50 ℃"					
Storage Temperature Range	-20 ℃~45 ℃					
Cooling	Natural Convection					
Ingress Proction	IP65					
Relative Humidity	5~95%,non-condensation					
Communication	CAN					
Certification	IEC 62619 /EN 6100C IEC 62040/UN38.3					
Life Cycle	6000 cycles					

DC 1500V Containerized String Inverter for PV Power Plant

RV-GSM3125C

Max. PV Voltage up to 1500V
DC/AC Ratio up to 1.5

AGC/AVC Night SVG Function LVRT/ HVRT/FRT Function

Full Power Output Nnder 50℃
IP54 Outdoor Protection

Modular Design for Easy Maintenance
Max. 28 DC Inputs

RV-GSM3125C

Model:	RV-GSM3125C
PV Input	
Max. Input Voltage	1500 V
MPPT Operating Voltage Range	925 V ~ 1300 V
Start-up Voltage	980 V
Max. Operating Input Current	4080 A
No.of MPP Trackers	2
No.of Strings per MPP Tracker	1
AC Output	
Rated Output Power	3125 kW@ 50℃
Max. Output Power	3600 kW@ 50℃
Rated AC Voltage	630V, 3L+1N+PE
AC Voltage Range	504 V ~ 693V
AC Grid Frequency / Range	40 ~ 55 / 55 ~ 65 (adjustable)
Rated Output Current	2864 A
Max. Output Current	3299 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)
Grid Connection	3-Phase
Max. Total Harmonic Distortion (THDi)	≤ 3 %
Efficiency	
Max. Efficiency	99.00%
Protection	
European Efficiency	98.70%
Anti-islanding Protection	Yes
DC Reverse Polarity Protection	Yes
AC Short-circuit Protection	Yes
DC Surge Protection	Yes, compatible with TYPE II protection class according to EN/IEC 62109-1
AC Surge Protection	Yes, compatible with TYPE II protection class according to EN/EN/IEC 62109-1
DC Input Protection	Circuit Breaker
AC Output Protection	Circuit Breaker
Overheat Protection	Yes
AC Short-circuit Protection	Yes
Current Leakage Monitoring	Yes
Insulation Detection	Yes
Anti-PID Function	Optional
Gerneral Data	
Dimensions (W x H x D)	2991 x 2591 x 2438 mm
Weight	5000 kg
Operating Temperature Range	-40 ~ + 60 °C
Topology	Transformerless
Cooling	Forced Air Cooling
Ingress Protection	IP54
Relative Humidity	0~100%(No Condensation)
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)
Mounting	Floor
Display	Touch Screen Display
Self-consumption (at night)	<100 W
Communication Interface	Modbus RS485

DC 1500V Outdoor String Inverter for PV Power Plant

RV-GSM3125D

Max. PV Voltage up to 1500V
DC/AC Ratio up to 1.8

AGC/AVC, Night SVG Function
LVRT/HVRT/FRT Function

Full Power Output Nnder 55℃
IP55 Outdoor Protection

Modular Design for Easy Maintenance
Max. 24 DC Inputs

RV-GSM3125D

Model:	RV-GSM3125D
PV Input	
Max. Input Voltage	1500 V
MPPT Operating Voltage Range	880 V ~ 1300 V
Start-up Voltage	940 V
Max. Operating Input Current	4009 A
No.of MPP Trackers	2
AC Output	
Rated Output Power	3125 kW@ 50℃
Max. Output Power	3438 kW@ 50℃
Rated AC Voltage	600 V, 3L+1N+PE
AC Voltage Range	510 V ~ 660 V
AC Grid Frequency / Range	40-55 / 55 ~ 65 (adjustable)
Rated Output Current	3007 A
Max. Output Current	3308 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)
Grid Connection	3-Phase
Max. Total Harmonic Distortion (THDi)	≤ 3 %
Efficiency	
Max. Efficiency	99.00%
European Efficiency	98.70%
Protection	
Anti-islanding Protection	Yes
DC Reverse Polarity Protection	Yes
AC Short-circuit Protection	Yes
DC Surge Protection	Yes, compatible with TYPE II protection class according to EN/IEC 62109-1
AC Surge Protection	Yes, compatible with TYPE II protection class according to EN/EN/IEC 62109-1
DC Input Protection	Load Break Switch + Fuse
AC Output Protection	Circuit Breaker
Overheat Protection	Yes
AC Short-circuit Protection	Yes
Current Leakage Monitoring	Yes
Insulation Detection	Yes
Anti-PID Function	Optional
Gerneral Data	
Dimensions (W x H x D)	2350 x 2400 x 1300 mm
Weight (kg)	3500
Operating Temperature Range	-40 ~ + 60 °C
Topology	Transformerless
Cooling	Forced Air Cooling
Ingress Protection	IP55
Relative Humidity	0~100%(No Condensation)
Max. Operating Altitude	4,000 m (13,123 ft.) (Derating above 2000 m)
Mounting	Floor
Display	Touch Screen Display
Self-consumption (at night)	<250 W
Communication Interface	Modbus RS485
Country of Manufacture	China

DC 1500V Containerized String Inverter for PV Power Plant

RV-GSM6250C-MV

Max. PV Voltage up to 1500V
DC/AC Ratio up to 1.5

AAGC/AVC Night SVG Function LVRT/ HVRT/FRT Function

Full Power Output Under 50℃
IP54 Outdoor Protection

Modular Design for Easy Maintenance
Max. 56 DC Inputs

RV-GSM6250C-MV

Model:	RV-GSM6250C-MV
PV Input	
Max. Input Voltage	1500 V
MPPT Operating Voltage Range	925 V ~ 1300 V
Start-up Voltage	980 V
Max. Operating Input Current	8160 A
No.of MPP Trackers	2
No.of Strings per MPP Tracker	1
AC Output	
Rated Output Power	6250 kW
Max. Output Power	7200 kW
AC Voltage Range	10 kV ~ 35 kV
AC Grid Frequency / Range	45 ~ 55 / 55 ~ 65 (adjustable)
Max. Output Current	6598 A
Adjustable Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)
Grid Connection	1
Max. Total Harmonic Distortion (THDi)	< 3%
Efficiency	
Max. Efficiency	99.00%
European Efficiency	98.70%
Transformer	
Rated Power	6250 kVA
Max. Power	7200 kVA
LV/MV Voltage	0.63kV-0.63kV/(10~35)kV
Vector Group	Dy11y11
Cooling	ONAN
Oil Type	Mineral Oil (PCB free)
Protection	
Anti-islanding Protection	Yes
DC Reverse Polarity Protection	Yes
AC Short-circuit Protection	Yes
DC Surge Protection	Yes, compatible with TYPE II protection class according to EN/IEC 62109-1
AC Surge Protection	Yes, compatible with TYPE II protection class according to EN/EN/IEC 62109-1
DC Input Protection	Circuit Breaker
AC Output Protection	Circuit Breaker
MV Output Protection	Circuit Breaker
Overheat Protection	Yes
AC Short-circuit Protection	Yes
Current Leakage Monitoring	Yes
Insulation Detection	Yes
Anti-PID Function	Optional
Gerneral Data	
Dimensions (W x H x D)	12192 x 2896 x 2438
Weight	29 T
Operating Temperature Range	-40 ~ + 60 °C
Topology	Transformerless
Cooling	Forced Air Cooling
Ingress Protection	IP54
Auxiliary Power Supply	5 kVA
Relative Humidity	0~100%(No Condensation)
Max. Operating Altitude	1000 m
Mounting Type	Floor
Display	Touch Screen Display
Communication Interface	Standard: Modbus RS485, Optional: IEC104 Optical Fiber

Application scenarios

- New energy distribution.
- commercial buildings.
- charging stations.
- data centers.

System Characteristics

- Outdoor IP54 design, adapt to complex environment.
- System cycle efficiency ≥90%
- High density battery
- Intelligent management and scheduling.

System composition

- lithium battery + EMS + PCS integration.
- Energy storage battery: 215kWh.
- Energy storage converter: 100kW.

RV-CNI100kW-215kWh

Model	RV-CNI100kW-215kWh
Battery parameters	
Battery type	Lithium iron phosphate
Cell spec	3.2V/280Ah
String confguration	1P240S
Rated energy capacity	215.04kWh
Rated voltage	DC768V
Voltage range	DC672~852V
The rated charge and discharge rate	0.5C
Depth of discharge	90%
Cooling	Liquid cooling
AC parameters	
Rated power (kW)	100
Rated current (A)	145
Rated voltage	400V AC
AC output	3P+N+PE
Rated grid frequency	50/60Hz
AC PF	-0.99~+0.99
Full power charge-discharge conversion time (ms)	<100
System parameters	
life cycle	≥8000
Max.eficiency	≥90%
Degree of protection	IP54
Anti-corrosion rating	C3
Operating temperature range	Discharge -15°C~52°C/Charge 3°C~52°C(>45°C Derating)
Storage temperature range	-20°C~45°C
Relative humidity	0~95%(non-condensing）
weight (kg)	2600
Fire configuration	Aerosol,pack-level immersion,proactive alarm
Working altitude	2000m(>2000m Derating)
Dimension (xDxH)	1300*1400*2300mm
Installation location	outdoors
Communication	RS485,Ethernet

All-in-One Containerized Battery Energy Storage Systems

RV-KESS 20HG / RV-KESS 40HG

- LFP Battery System, PCS, Fire Suppression System
- Quicker One-stop Delivery with In-factory Installation and Commissioning
- Equipped with PQ , VSG, VF, and Black Start
- Standard 20/40 Feet Container, Easy Transportation
- HVRT/LVRT
- IP54 Protection, Can Handle Harsher Outdoor Environment
- Standard Communication Portal, Fitting Third Party SCADA
- Smart and Efficient HVAC Design for Lower Loss and Better Safety

RV-KESS Series

Model:	RV-KESS20HG	RV-KESS40HG
Power Range	50 ~ 630 kW	100 ~ 1250 kW
Battery Capacity	Customised	
PV Input Access	Optional	
On/Off-Grid Switching	Optional	
PCS Chamber Cooling Method	Smart Fan Cooling	
Battery Chamber Cooling Method	Air Conditioner	
Fire Suppression System in Battery Chamber	FM200/Novec 1230	
Ambient Temperature	-15°C ~ 45°C	
Max. Operating Altitude	3000 m (9,842.5 ft.)	
Relative Humidity Range	5%-95% (No Condensation)	
Ingress Protection	IP54	
Dimensions (W x H x D)	6058 x 2438 x 2896 mm	12192 x 2438 x 2896 mm

EMS Energy Management System

EMS Cloud Platform

Friendly human interaction interface:

· Combined with comprehensive data acquisition and monitoring system functions.

24/7 real-time monitoring:

· Seamless accessing to the scheduling center, and receiving scheduling command.
· Realizing friendly data transmission between BMS and PCS devices.
· Real-time response fault alarm function.

Flexible application scenarios:

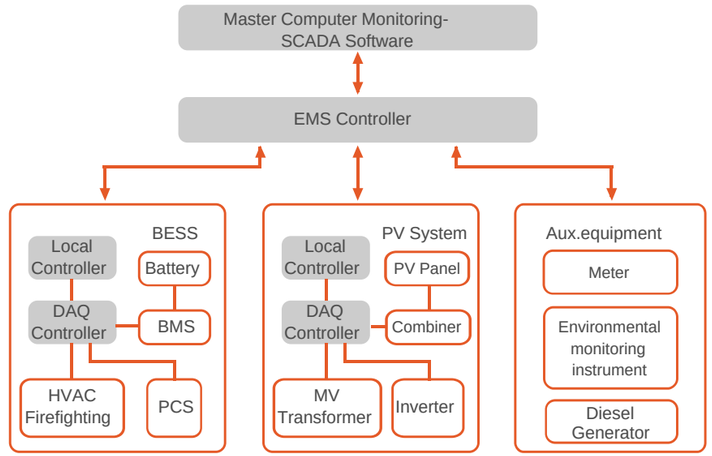
· Advanced control strategy to realize peak and frequency modulation, peak and valley arbitrage, demand management, etc.

Function Presentation:

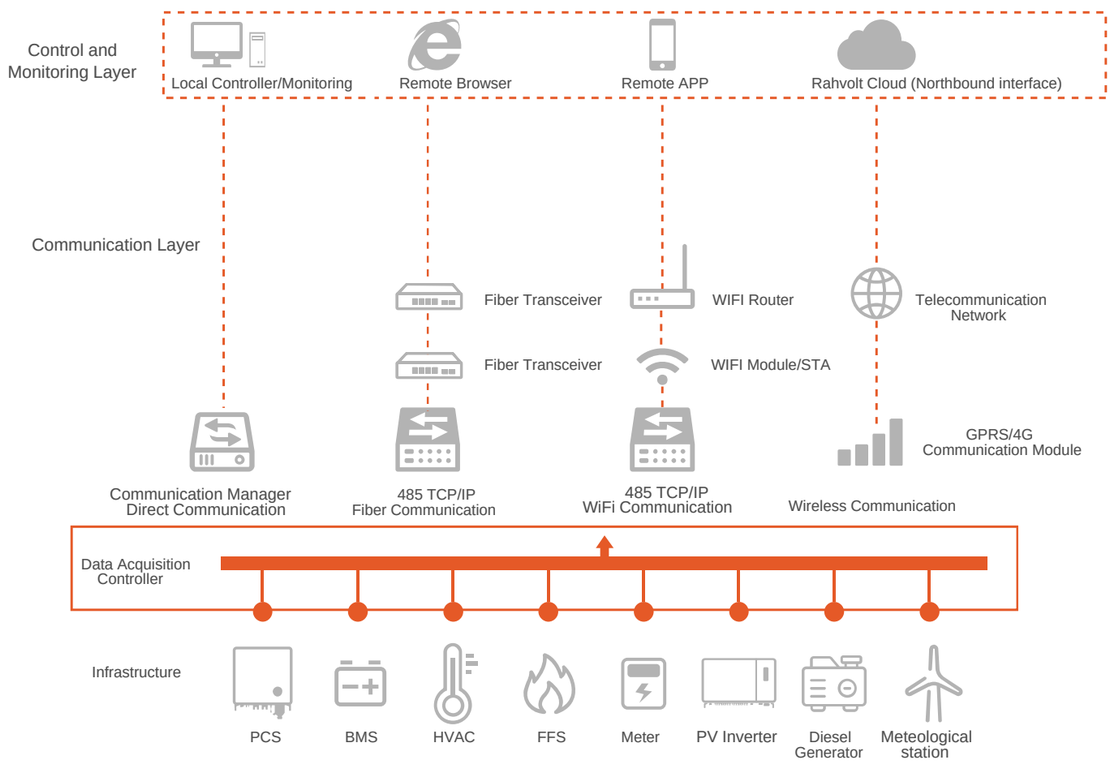
Platform Function	Detailed Presentation
BOperation data acquisition and monitoring	EMS local controller collects the real-time information (i.e. PCS, BMS, transformer monitoring and control device), and the processed data (i.e. real-time values, historical statistics, trends, alarm events, etc.) can be displayed and forwarded in the monitoring screen, and saved to the historical data server.
Independent SOC control	When EMS cannot control operation of energy storage battery, PCS control charging and discharging of energy storage battery independently to keep SOC within reasonable range.
Smooth Output	Generation side - EMS controll the charge and discharge of BESS or the output of other power generation to smooth power output by real-time monitoring of power generation User side - EMS controll the charge and discharge of BESS to achieve peak shifting by real-time monitoring of power consumption.
Time-of-use price	EMS control the battery energy storage to perform different charging and discharging strategies at diffrent time of use price, so that the user can realize peak-valley arbitrage.
Power distribution control	In the on-grid mode, EMS follows power grid dispatching orders and data acquisition(i.e. current SOC, SOH, charging and discharging state, and alarm data) to implement power distribution control.
Anti-power reversal control	when the microgrid acess to power grid, EMS ensures the micro grid to meet load electricity consumption by increasing the energy storage charging power or reducing power generation output.
Power security boundary control	Due to the sudden load fluctuation in the micro-grid system (i.e. solar, wind), the system adopts emergency control measures to increase/decrease the system output to make it return to the safe operating range.

EMS Energy Management System

Energy Management System



Data Acquisition and Communication Structure



Wi-Fi connection & monitor set up for hybrid inverters