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	