

Three-phase hybrid inverter Supports high power components

Key strengths

- Support BMS (non-standard) remote upgrade.
- Support full power discharge, automatic battery charge and discharge management.
- Compatible with single-phase and three-phase loads.
- Supports high power components.
- Capable of Supporting 100% Unbalanced Loads.



PV string input

Model	R6KH3-P	R8KH3-P	R10KH3-P	R12KH3-P	R15KH3-P
Max. PV input power (kW)	9	12	15	18	22.5
Max. PV voltage (V)	1,000				
MPPT voltage range (V)	180-850				
Full power MPPT voltage range (V)	250-850	330-850	430-850	510-850	425-850
Start-up voltage (V)	125				
Max. input current per MPPT (A)	18/18			20/20	
Max. short-circuit current (A)	25/25			30/30	
No. of MPPT trackers	2				
MPPT number/Max. input strings number	1/1	1/1	1/1	1/1	2/2
Rated input voltage	600				

Technical Parameters

AC Output

Nominal output power to grid (kVA)	6	8	10	12	15
Max. apparent power to grid (kVA)	6.6	8.8	11	13.2	16.5
Max. apparent power from grid (kVA)	13.2	17.6	22	26.4	33
Max. apparent current from grid (A)	19.1	25.5	31.8	38.1	47.6
Nominal output current to grid (A)	8.7	11.5	14.4	17.3	21.7
Max.output current to grid (A)	9.5	12.7	15.9	19.1	23.8
Nominal grid voltage (V)	3W+N+PE, 220 / 380 V; 230 / 400 V; 240 / 415 V				
Nominal grid frequency (Hz)	50/60				
THDi	<3%				

Battery

Max.charging /discharging power (kW)	6.6	8.8	11	13.2	16.5
Battery voltage range (V)	125-600				
Battery Working Voltage Range (V)	150-550				
Min.Full Power Voltage@EPS	160	210	260	310	385
Max.Charging/Discharging Current (A)	50				
Rated.charging /discharging current (A)	40				
Battery type	Lithium and Lead Acid Battery				

ESP Output

Nominal output power (kVA)	8	8	10	12	15
Max. apparent power (kVA)	8.8	8.8	11	13.2	16.5
Nominal output current (A)	8.7	11.5	14.4	17.3	21.7
Max.output current (A)	9.5	12.7	15.9	19.1	23.8
Nominal output voltage (V)	400 ,3W+N+PE				
Nominal output frequency (Hz)	50/60				
THDu	<2%				
Max.efficiency	97.9%	97.9%	98.0%	98.0%	98.1%
Europe efficiency	97.3%	97.4%	97.5%	97.5%	97.5%
MPPT efficiency	99.9%				
Max.battery charge/discharge efficiency	97.0%				

General Data

Ingress protection	IP65
Operating temperature range (°C)	-35~60
Relative humidity	0~100%
Operating altitude (m)	2000m(Derating above 2000m)
Dimensions (W*H*D)	530*560*220mm
Weight	32kg
Cooling	Natural convection
Noise emission (dB)	≤35
Installation	Wall mounted

Supported protections
Island Protection / PV reverse polarity protection / Battery reverse polarity protection / Insulation monitoring / Residual current monitoring / AC over current protection / AC over power protection / Back-up Output Short Protection / Short circuit protection / Island Protection / Battery reverse Polarity / Insulation Resistor Detection

EMC

IEC/EN 61000-6-1:2019, IEC/EN 61000-6-2:2019, IEC/EN 61000-6-3:2021, IEN/EN 61000-6-4:2019, IEC/EN 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021, IEC/EN 61000-3-11:2019, EN 61000-3-12:2011

On-grid Standards

Europe: EN 50549-1:2019/AC:2019, Poland:EN50549-1:2019/Rfg:2016/NC Rfg:2018/PTPIREE:2021, Germany:VDE-AR-N 4105:2018 /DIN VDE V 0124-100(VDE V 0124-100):2020, South Africa: NRS 097-2-1:2017 Edition 2.1, UK:G98/G99/1-6:2022, Spain:UNE217001:2020 /UNE217002:2020/NTS V2.1:2021-07, IEC61727:2004/IEC62116:2014/IEC61683:1999, Hungary:EN50549-1:2019/RFG:2016/ Hungary, Italy CEI0-21, Holland:EN 50549-1:2019/AC:2019 with Netcode elektriciteit:2022 Type A, Belgium:C10/11:2021, France:Arrêté du 9 juin 2020+Arrêté du 31 mai 2021, Denmark:TR 3.3.1:2023-01

Safety standard

IEC/EN62109-1:2010, IEC/EN62109-2:2011

Interface

HMI	LCD; APP
BMS	CAN
EMS/Meter	RS485/RS485
Supported communication interface	WiFi