RT-R Series

G2S Single-phase
Energy Storage Inverter

KEY STRENGTHS

- Supports on/off-grid AC coupling function.
- Compatible with three-phase applications and multi-unit parallel operation.
- Supports intelligent load management (customized).
- Supports BMS remote upgrade function (customized).

G2S SERIES WITHOUT COLOR SCREEN

G2S COLOR SCREEN SERIES

Model	RT-R8KL1DA-G2S	RT-R10KL1DA-G2S
PV input data		
Max. PV input power (kW)	12	15
Max. PV input voltage (V)	550	
Start-up voltage (V)	100	
MPPT voltage range (V)	100~430	
Rated PV input voltage (V)	360	
No. of MPPT trackers	2	
No. of strings per MPPT tracker	1 / 2	
Max. input current per MPPT (A)	16 / 16+16	
Max. short-circuit current per MPPT (A)	24 / 24 / 24	

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Model	RT-R8KL1DA-G2S	RT-R10KL1DA-G2S
Battery input data		
Battery type	Lithium-ion / Lead-acid	
Max. charge / discharge power (kW)	8	10
Battery voltage range (V)	40~58	
Rated battery voltage (V)	48	
Max. charging / discharging current (A)	160 / 160	200 / 200
Rated charge / discharge current (A)	160 / 160	200 / 200
Battery charging strategy	Self-adaption to BMS	
BMS communication	CAN	
AC output data (grid side)		
Rated output power (kW)	8	10
Max. apparent output power (kVA)	8.8	10
Max. apparent input power(kVA)	8.8	10
Rated grid voltage (V)	230	
Grid voltage range (V)	176~270	
Grid input voltage (V)	230	
Rated grid frequency (Hz)	50 / 60	
Grid frequency range(Hz)	47~61	
Rated output current (A)	34.8	43.5
Max. AC output current (A)	38.3	43.5
Max. apparent input current (A)	38.3	43.5
Power factor	>1 (0.8 leading ~ 0.8 lagging)	
Max. grid pass-through current (A)	43.5	
THDi	< 3%	
Grid type	L+N+PE	
AC output data (back-up)		
Rated output power (kW)	8	10
Max. apparent output power (kVA)	8.8	10
Rated output voltage (V)	230	
Rated output frequency (Hz)	50 / 60	
Rated output current (A)	34.8	43.5
Max. AC output current (A)	38.3	43.5
Peak output power	⩾110%, 10mins; ⩾120%, 1min; ⩾130%, 1s; ⩾150%, 100ms	
Back-up switch time (ms)	<20	
THDu	<3%	
Protection		
Supported protection	PV reverse polarity protection, Anti-islanding protection, Ground fault protection, Leakage current protection, Insulation resistance detection, Backup output short circuit protection, AC under-voltage protection, AC output over-current protection, AC over-voltage protection	
Surge protection	DC Type III / AC Type III	
Over voltage category	DC Type III / AC Type III	
Certifications and standards		
Certificates	ENIEC 61000-6-1:2019, EN IEC 61000-6-3:2021; EN 62109-1:2010; EN 62109-2:2011	
General data		
Europe efficiency	⩾96.5%	
Ingress protection	IP66	
Operating temperature range (℃)	-25~+60	
Cooling	Forced air cooling	
Relative humidity	0-95% (non-condensing)	
Operating altitude (m)	0~2,000(> 2,000 power derating)	
Dimensions W*D*H (mm)	486×231×530	
Weight (kg)	25.8	
Inverter topology	Non-Isolated	
Noise emission (dB)	<55	
PV connection terminals	MC4	
Display and communication		
Display	LCD	
Communication	RS485 / CAN	
Connectivity	Wi-Fi and Lan (via external adapters)	