



Residential Energy Storage Inverters

Split-Phase hybrid inverter

Key strengths

- Plug & Play.
- Capable of supporting 100% unbalanced loads.
- 3 phase 208Vac & parallel function available.
- 100A pass through.
- AC couple to retrofit existing solar system(on-grid & off-grid).
- Grid & diesel Generator separately connected, support storing energy from diesel generator.

PV input

Model	R5KLNA	R6KLNA	R7K6LNA	R8KLNA	R10KLNA
Max.DC input power (kW)	7.5	9	12	12	15
No. of MPPT trackers	4				
MPPT voltage range (without battery)(V)	120~430 / 120~500				
MAX.DC input voltage (V)	500				
MAX. input current (A)	14				
MAX. short circuit current (A)	22				

Battery input

Nominal voltage (V)	48				
MAX.charging/discharging current (A)	120/120	135/135	190/190	190/190	190/210
Battery voltage range (V)	40-60				
Battery type	Lithium /Lead-acid				
Charging strategy for Li-Ion battery	Self-adaption to BMS				

AC output(on-grid)

Nominal output power output to grid (kVA)	5	6	7.6	8	10
MAX. apparent power output to grid (kVA)	5.5	6.6	8.4	8.8	11
Output voltage range (V)	(110-120)/(220-240)split phase, 240V single phase				
Output frequency (Hz)	60(55 to 65)				
Nominal AC current output to grid (A)	20.8	25	31.7	33.3	41.7
Max. AC current output to grid (A)	22.9	27.5	34.8	36.7	45.8
Max. grid passthrough current (A)	100				
Output THDI	<3%				

AC output(back-up)

Nominal. apparent power (kVA)	5	6	7.6	8	10
Max. apparent power (kVA)	5.5	6.6	8.4	8.8	11
Nominal output voltage L-N/L-L2 (V)	120/240				
Nominal output frequency (Hz)	60				
Automatic switchover time (ms)	<20				
Output power factor	0.8leading~0.8lagging				
Output THDu	<2%				

Protection

Grounding detection	Yes
Arc fault protection	Yes
Island protection	Yes
Battery reverse polarity	Yes
Insulation resistor detection	Yes
Residual current monitoring unit	Yes
Output over current protection	Yes
Back-up output short protection	Yes
Output over voltage protection	Yes
Output under voltage protection	Yes

General data

Mppt efficiency	99.9%
Europe efficiency (PV)	96.5%
PV to grid efficiency (PV)	97.2%
Battery to load efficiency	95.2%
PV to battery charging efficiency	96.1%
Grid to battery charging efficiency	95.0%
Output conduit (mm)	25.4
PV input conduit (mm)	25.4
BAT input conduit (mm)	35.4
Operating temperature range (°f)	-13 to 140
Relative humidity	0-95%
Operating altitude	0~4,000m(Derating above 2,000m altitude)
Ingress protection	IP65/NEMA 3R
Built-in breaker	Optional
Weight (lbs)	105 (110 with breaker)
Dimensions W*H*D (In.)	17.7 x 32.3 x 9.4
Cooling	FAN cooling
Noise emission (dB)	38
Display	LCD,Touch panel(optional)
Communication with BMS/Meter/EMS	RS485, CAN
Supported communication interface	RS485, WLAN, 4G (optional)
Self-consumption	<25W
Safety	UL1741SA all options, UL1699B, CSA 22.2
EMC	FCC part 15 class B
Support diesel generator	YES
Grid connection standards	IEEE 1547, IEEE 2030.5, Hawaii rule 14H, Rule 21 phase I,II,III

Other data

Peak power (off grid)	105%,60s / 110%,30s / 120%,10s / 150%,20ms
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