

REVO Residential Energy Storage Inverters

# Split-Phase hybrid inverter

Battery low voltage



## KEY STRENGTHS

- Support the construction of three-phase systems.
- Capable of supporting 100% unbalanced loads.
- Support 4-channel MPPT
- 200A pass through.
- AC solar to retrofit existing solar system(on-grid & off-grid).
- Grid & generator separately connected, support storing energy from diesel generator.

Model	R12KLNA	R16KLNA
<b>PV input data</b>		
Max. DC input power (kW)	18	24
No. of MPPT trackers	4	
MPPT voltage range (without battery)(V)	120~500	
MPPT voltage range (with battery) (V)	120~430	
Max. DC input voltage (V)	500	
Max. input current per MPPT (A)	16/16/16/16	20/20/20/20
Max. short-circuit current per MPPT (A)	22/22/22/22	25/25/25/25

**Battery input data**

Rated battery voltage (V)	48	
Max. charging / discharging current (A)	250/260	260/280
Battery voltage range (V)	40~58	
Battery type	Lithium-ion / Lead-acid	
Charging controller	3-Stage with equalization	

**AC output data (on-grid)**

Rated output power output to grid (kW)	12	16
Max. apparent power output to grid (kVA)	13.2	17.6
Rated AC voltage (L-N/L1-L2) (V)	(110~120)/(220~240V) split phase, 240V single phase	
Rated AC frequency (Hz)	60 (55 ~ 65)	
Rated AC current (A)	50	66.7
Max. AC current (A)	55	73.3
Max. grid passthrough current(A)	200	
Output THDi	<3%	

**AC output data (back up)**

Rated apparent power (kW)	12	13
Max. apparent power (kVA)	12(No PV) / 13.2(With PV)	13.2
Rated output voltage (V)	120/240	
Rated output frequency (Hz)	60	
Power factor	0.8leading~0.8lagging	
Output THDu	<2%	

**Protection**

Supported protection	Grounding detection, Arc fault protection, Island protection, Insulation resistor detection, Residual current monitoring unit, Output over current protection, Back-up output short protection, Output over voltage protection, Output under voltage protection
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**Certifications and standards**

Safety	UL1741, UL1741SA&SB all options, UL1699B, CSA -C22.2 NO.107.1-01, RSD (NEC690.5, 11, 12)
EMC	FCC Part 15 Class B
Grid connection standards	IEEE 1547, IEEE 2030.5, HECO Rule 14H, CA Rule 21 Phase I, II, III, CEC, CSIP, SRD2.0, SGIP, OGPe, NOM, California Prob65

**General data**

MPPT efficiency	99.9%
Europe efficiency (PV)	96.2%
Max. PV to grid efficiency (PV)	96.5%
Max. battery to load efficiency	94.6%
Max. PV to battery charging efficiency	95.8%
Max. grid to battery charging efficiency	94.5%
Ingress protection	IP65 / NEMA 3R
Operating temperature range (°C)	-25~+60
Cooling	Fan cooling
Relative humidity	0-95%
Operating altitude (m)	0~4,000(Derating above 2,000 altitude)
Dimensions W*D*H (mm)	495 x 260 x 900
Weight (with breaker) (kg)	56
Noise emission (approximately)(dB)	57
Self-consumption (W)	<25

**Display and communication**

Display	Touch panel
Communication with BMS/meter/EMS	RS485, CAN
Supported communication interface	RS485, 4G(optional), Wi-Fi