

REVO Residential Energy Storage Inverters

Split-Phase hybrid inverter

Battery low voltage



Key strengths

- Plug & Play.
- 200A pass through.
- Capable of supporting 100% unbalanced loads.
- AC couple to retrofit existing solar system(on-grid & off-grid).
- 3 phase 208Vac & parallel function available.
- Grid & diesel generator separately connected, support storing energy from diesel generator.

PV input

Model	R12KLNA
Max.DC input power (kW)	18
No. of MPPT trackers	4
MPPT voltage range (without battery)(V)	120~500 / 120~430
MAX.DC input voltage (V)	500
MAX. input current per MPPT (A)	16/16/16/16
MAX. short current per MPPT (A)	22

Battery input

Nominal voltage (V)	48
MAX.charging/discharging current (A)	250/260
Battery voltage range (V)	40-58
Battery type	Lithium /Lead-acid
Charging controller	3-Stage with equalization

AC output(on-grid)

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

AC output(back-up)

Nominal. apparent power (kVA)	12
Max. apparent power (no PV) (kVA)	12
Max. apparent power (with PV) (kVA)	13.2
Nominal output voltage(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
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)	96.2%
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%
Operating temperature range (°C)	-25~+60
Relative humidity	0-95%
Operating altitude	0~4,000m(Derating above 2,000m altitude)
Ingress protection	IP65/NEMA 3R
Built-in breaker	Optional
Weight (kg)	53kg(56kg with breaker)
Dimensions W*H*D (mm)	495 x 900 x 260
Cooling	FAN cooling
Noise emission (dB)	38
Display	Touch panel
Communication with BMS/Meter/EMS	RS485, CAN
Supported communication interface	RS485, 4G (optional), Wi-Fi
Self-consumption	<25W
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

Other data

Peak power (off grid)	110%,30s / 120%,10s / 200%,5s
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