

GCL Hybrid Inverter

Honor INV RY- 3 / 3.6 / 5 / 6 K-AUP1



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 135A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Technical Data

Model	RY-3K24V-AUP1	RY-3K-AUP1	RY-3.6K-AUP1	RY-5K-AUP1	RY-6K-AUP1
Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	20~30	40~60	40~60	40~60	40~60
Max. Charging Current (A)	140	70	90	120	135
Max. Discharging Current (A)	140	70	90	120	135
Number of battery input	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
Maximum Short Circuit Current(A)	140	70	90	120	135
PV String Input Data					
Max. DC Input Power (W)	3900	3900	4680	6500	7800
Rated PV Input Voltage (V)	370 (125~500)				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	125~425				
Full Load DC Voltage Range (V)	300~425				
PV Input Current (A)	13		13+13		
Max. PV ISC (A)	19.5		19.5+19.5		
Number of MPPT / Strings per MPPT	1/1		2/1+1		
Maximum Short Circuit Current(A)	17	17	17+17	17+17	17+17
AC Output Data					
Rated AC Output and UPS Power (VA)	3000		3600	5000	6000
Max. AC Output Power (W)	3000		3600	5000	6000
AC Output Rated Current (A)	13/12.5		15.7/15	21.7/20.8	26.1/25
Max. AC Current (A)	13/12.5		15.7/15	21.7/20.8	26.1/25
Max. Continuous AC Passthrough (A)	35				40
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50Hz/45Hz-55Hz; L/N/PE 230V/ 195.5V-253V, 240V/204V-264V				
Grid Type	Single Phase				
Total harmonic Distortion(THD)	< 3% (of nominal power)				
DC current injection	<0.5% In				
Maximum Short Circuit Current(A)	60	60	60	75	75
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Protection					
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection				
Output Over Voltage Protection	DC Type II/AC Type III				
Certifications and Standards					
Grid Regulation	AS/NZS 4777.2				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range (°C)	-40~60 °C, >45 °C derating				
Cooling	Smart cooling				
Noise (dB)	<30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	14			15	
Size (mm)	330W x 433H x238D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5/10 years				
Inverter Topology	Transformerless				
Protective Class	Class I				
Backfeed Short-circuit Current	PV 0A				