

Island: your solution when mains is absent

- IGBT Technology with a high commutation frequency
- Insulation transformer in output
- Very high crest factor (3 : 1 and more on request)
- High overload capability and short-circuit proof
- Peak current control adjustable from 200% to 300% of the rated current from 3 to 5 sec.
- Well able to supply power to devices which produce significant distortion
- Optional maintenance and static by-pass (on request transformer and stabilizer on by-pass)
- Very low harmonic distortion (THD < 2%)
- Mimic flow diagram on request
- Event history with time stamp up to 4000 events on request
- Up to 4 units may be connected in multimaster parallel (either distributed or centralized) managed by CAN-bus
- Provision of optional computer interfaces (RS232-RS485-SNMP-CAN) and voltage-free contacts
- High MTBF (> 150000 h)
- Low MTTR (< 0.5 h)
- High efficiency starting from 25% of the load with consequent reduction of the operating cost
- Easy installation and maintenance with full front accessibility
- Compact size (customized cabinets on request)
- Higher protection degrees on request
- Upon request a wide range of input voltage for fuel cells



LAYER ELECTRONICS recommends its ISLAND series of inverters, which is a high technology product, to anyone who needs AC where the **public grid** is **not present**. Designed to be fed by **different input voltages** on customer's request, the ISLAND series of inverters supplies a **sine wave** output voltage with very low distortion. The high frequency based conversion and the implemented topology allow a **high efficiency** of the inverters.

The **high reliability** is due to the high professional level of components used and to its simplicity.

The management through Digital Signal Processor (DSP) allows so many controls to also **protect** the inverter and the connected load under the **harshest electric conditions**, environmental and in overload. Particular attention is given in safeguarding the connected load through an **insulation transformer in output**.

Technical Data ISLAND series 1-Ph

MODEL	GCI-700/1	GCI-700	GCI-701	GCI-702	GCI-703	GCI-703/1	GCI-704	GCI-706	GCI-708	GCI-710	GCI-712	GCI-714	GCI-716	GCI-718	GCI-720						
Power - kVA	1	1.5	2	2.5	3	4	5	7.5	10	15	20	25	30	40	50						
Input																					
Voltage	24 / 36 / 48 / 72 / 110 / 150 / 220 / 400 Vdc ± 20%																				
Output																					
Wave-form	SINE WAVE																				
Harmonic distortion	< 2%																				
Phases	1-Ph																				
Voltage	220 / 230 / 240 Vac ± 1% (100 / 110 / 115 / 120 / 127 V on request)																				
Frequency	50 / 60 Hz ± 0.05%																				
Efficiency	> 92%																				
Protections	Overload, overtemperature, min/max battery voltage, min/max inverter voltage																				
Short-circuit	With electronic protection																				
Overload	125% for 10 min., 150% for 1 min., 200% for 0.1 sec.																				
Signals																					
Led	On, Stand-by, Fault																				
Display	Optional																				
External communication	RS232 - RS485 - SNMP - CAN (optional)																				
Environmental																					
Operating temperature	0°C ÷ 50°C																				
Non-condensing humidity	0% ÷ 95%																				
Noise (at 1 m)	< 50 dBA																				
Cooling	Forced																				
Protection rating	IP20																				
Dimensions																					
W x D x H - mm	500 x 250 x 740			600 x 300 x 850			600 x 400 x 1050			800 x 400 x 1050			800 x 400 x 1250			800 x 600 x 1300			800 x 800 x 1300		
Weight - kg	20	25	30	35	40	50	60	80	100	110	120	150	180	200	220						
CE Marking	2014/30/EU; 2014/35/EU																				
Compliance with the standards	EN 60950-1; EN 61000-6-3; EN 61000-6-1; EN 61000-3-2; EN 61000-3-3; EN 55022; EN 55014-1; IEC 146																				

Technical Data ISLAND series 3-Ph

MODEL	GCI-800	GCI-802	GCI-804	GCI-806	GCI-808	GCI-810	GCI-812	GCI-814	GCI-816	GCI-818	GCI-820	GCI-822	GCI-824	GCI-826
Power - kVA	5	7.5	10	15	20	30	40	50	60	75	100	120	150	200
Input														
Voltage	24 / 36 / 48 / 72 / 110 / 150 / 220 / 400 Vdc ± 20%													
Output														
Wave-form	SINE WAVE													
Harmonic distortion	< 2%													
Phases	3-Ph + N													
Voltage	380 / 400 / 415 Vac ± 1% (200 / 208 / 220 / 440 / 480 V on request)													
Frequency	50 / 60 Hz ± 0.05%													
Efficiency	> 92%													
Protections	Overload, overtemperature, min/max battery voltage, min/max inverter voltage													
Short-circuit	With electronic protection													
Overload	125% for 10 min., 150% for 1 min., 200% for 0.1 sec.													
Signals														
Led	On, Stand-by, Fault													
Display	Optional													
External communication	RS232 - RS485 - SNMP - CAN (optional)													
Environmental														
Operating temperature	0°C ÷ 50°C													
Non-condensing humidity	0% ÷ 95%													
Noise (at 1 m)	< 50 dBA													
Cooling	Forced													
Protection rating	IP20													
Dimensions														
W x D x H - mm	600 x 400 x 1050		800 x 600 x 1300			800 x 800 x 1300			800x800 x 1500	1200 x 1100 x 1900			1400x 1100x1900	
Weight - kg	100	110	150	170	180	200	220	240	300	550	700	800	900	1500
CE Marking	2014/30/EU; 2014/35/EU													
Compliance with the standards	EN 60950-1; EN 61000-6-3; EN 61000-6-1; EN 61000-3-2; EN 61000-3-3; EN 55022; EN 55014-1; IEC 146													