DC-AC inverters

















Operating principle

Developed for professional use, in harsh environments, KERSINE inverters offer up to 3,6kVA power. Thanks to their **H**igh **F**requency technology they are lightweight and they offer compact dimensions which are suitable for the widest range of applications.

Optional built-in relay board allows to switch automatically to AC shore-power or genset.



High power

They are powerful enough to sustain high-power AC devices consumption (microwaves oven, coffee machine, hair dryer, etc.).



No derating

They deliver up to 3.6kVA, regardless of the type of device connected.



Pure sinewave

Thanks to their sinusoidal signal without harmonic distortion, your devices are protected and energy loss is reduced.



30A relays board (option)

KERSINE+ inverters have built-in alarms and protections. An optional 30A relay board enables automatic source switching between AC mains, generator, and battery



Easy and robust installation

Installation is simple: connection through detachable terminal blocks, faston lugs, and ring lugs.. Because of its HF technology Kersine+ is very light (3 or 4 times lighter than low frequency technology).



CAN-Bus interface

A serial CAN-Bus interface allows control and configuration of KERSINE+ inverters in real time.



Parallel mounting

The inverters can be parallel-mounted to increase the output power to a maximum of 14kVA (4 units). Three-phase operation is also possible (with 3 units). Planned avaibility 2025.



Bluetooth interface

KERSINE+ is equipped with a Bluetooth Low Energy (BLE), variant of "classic" Bluetooth. The major advantage of BLE is its low power consumption as it consumes half the power of a classic Bluetooth.



Model	12VDC 2400VA	12VDC 3600VA	24VDC 2400VA*	24VDC 3600VA	48VDC 2400VA	48VDC 3600VA
DC Input						
Voltage	10.5V	'- 16V	21V -	- 32V	42V - 64V	
Maximum current	30	0A	15	DA	75A	
Consumption without load	30W					
Consumption in sleep mode via Bluetooth		5W				
Consumption in OFF mode (switch OFF)		20mW				
Efficiency			92	%		
Input fuse	40	0A	20	0A	10	0A
AC Output						
Voltage range			230VAC	: +/- 5%		
Frequency selectable			50/6	0Hz		
Rated Power at 25°C / 77°F	2000W	3000W	2000W	3000W	2000W	3000W
Power at 40°C / 104°F	1800W	2400W	2400W	3000W	2000W	3000W
Power at 55°C / 131°F	1600W	1800W	1800W	2400W	1800W	2400W
Peak power (3s at 25°C / 77°F)	3000W	4500W	3000W	4500W	3000W	4500W
Earth relay		1×30A				
Waveform	Sinusoidal THD < 3%					
Specific mounting			Up to 4 units in parallel n	node / 3 for three-phase		
AC fuses (phase and neutral)	25A					
AC Intput						
Voltage range	230VAC +/- 5%					
Frequency selectable	50/60Hz					
Rated Power at 50°C (122°F)	3 x 30A (1 double and 1 single)					
Environment						
Cooling	Electric fans controlled in T° and current					
Operating temperature	From -20°C to +65°C (-4°F to 149°F)					
Storage temperature	From -40°C to +70°C (-40°F to 158°F)					
Relative humidity	up to 70% (95% without condensation)					
Bluetooth	Low energy bluetooth (BLE) - Power: +9dBm (frequency: 2412-2484MHz)					
Casing						
Length, height, depth / Weight	270 x 410 x 130mm (10.6 x 16.1 x 5.1 in) / 7.4kg (16.3 lb)					
Protection factor	IP23					
Electronic card protection	Water-repellent varnish (marine environment)					
Communication port	CAN-Bus (NMEA on option) / Bluetooth					
Standards						
CE declaration of conformity	Available on request					
CE / EMC	EN61204-3					
CE / Security - Others	EN60335-2-29 - E marking (pending)					
Protections						
Input	Reverse Polarity (fuses) / Under voltage / Over voltage					
Output	Short-circuitry / Overload / Over Temperature					
Options						
	ON/OFF remote command - P/N : KERS-ON-OFF					
Kersine+ with relay board	KERS12-230/2400-REL KERS12-230/3600-REL KERS24-230/2400-REL KERS24-230/3600-REL KERS48-230/2400-REL KERS48-230/3600-REL					



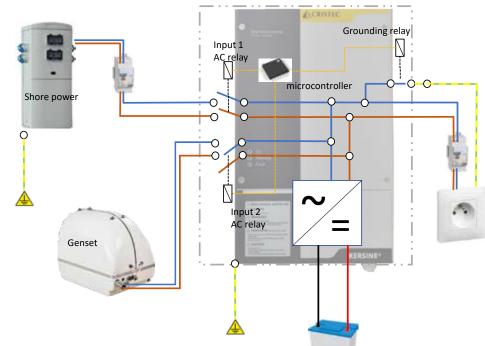
Part Number						
Model	12VDC 2400VA	12VDC 3600VA	24VDC 2400VA	24VDC 3600VA	48VDC 2400VA	48VDC 3600VA
DC Input			l			
Voltage	10.5\	′ - 16V	21V -	- 32V	42V - 64V	
Maximum current	30	300A 150A 75A			5A	
Consumption without load			30	W		
Consumption in sleep mode via Bluetooth		,	5\	N		
Consumption in OFF mode (switch OFF)			20n	nW		
Efficiency			92	%		
Input fuse	40	10A	20	0A	10	0A
AC Output						
Voltage range			120VAC	:+/- 5%		
Frequency selectable			50/6	0Hz		
Rated Power at 25°C / 77°F	2000W	3000W	2000W	3000W	2000W	3000W
Power at 40°C / 104°F	1800W	2400W	2400W	3000W	2000W	3000W
Power at 55°C / 131°F	1600W	1800W	1800W	2400W	1800W	2400W
Peak power (3s at 25°C / 77°F)	3000W	4500W	3000W	4500W	3000W	4500W
Earth relay		1×30A				
Waveform	Sinusoidal THD < 3%					
Specific mounting	Up to 4 units in parallel mode / 3 for three-phase					
AC fuses (phase and neutral)	25A					
AC Intput						
Voltage range	120VAC +/- 5%					
Frequency selectable	50/60Hz					
Rated Power at 50°C (122°F)	3 x 30A (1 double and 1 single)					
Environment						
Cooling	Electric fans controlled in T° and current					
Operating temperature	From -20°C to +65°C (-4°F to 149°F)					
Storage temperature	From -40°C to +70°C (-40°F to 158°F)					
Relative humidity	up to 70% (95% without condensation)					
Bluetooth	Low energy bluetooth (BLE) - Power: +9dBm (frequency: 2412-2484MHz)					
Casing						
Length, height, depth / Weight	270 x 410 x 130mm (10.6 x 16.1 x 5.1 in) / 7.4kg (16.3 lb)					
Protection factor	IP23					
Electronic card protection	Water-repellent varnish (marine environment)					
Communication port	CAN-Bus (NMEA on option) / Bluetooth					
Standards						
CE declaration of conformity	Available on request					
CE / EMC	EN61204-3					
CE / Security - Others	EN60335-2-29 - E marking (pending)					
Protections						
Input	Reverse Polarity (fuses) / Under voltage / Over voltage					
Output	Short-circuitry / Overload / Over Temperature					
Options						
	ON/OFF remote command - P/N : KERS-ON-OFF					
Kersine+ with relay board	KERS12-115/2400-REL KERS12-115/3600-REL KERS24-115/2400-REL KERS24-115/3600-REL KERS48-115/3600-REL KERS48-115/3600-REL					

KERSINE+ DC-AC INVERTERS

Principle schematic

Kersine stand alone





Kersine with relay board option

AC output is powered directly by shore power input. In case of grid power shortage, Kersine switches to genset AC input as main supply. If no input is available from shore and genset, Kersine switches to DC input. Grounding relay is switched off (open) when input comes from shore power.

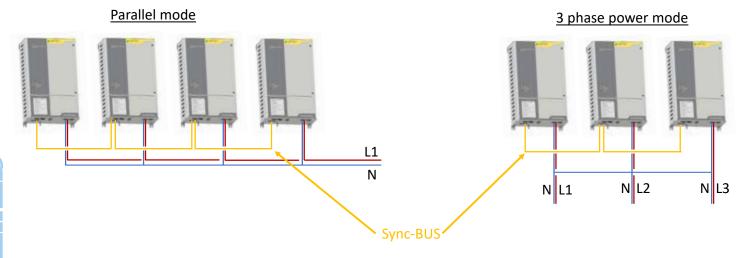
Option:



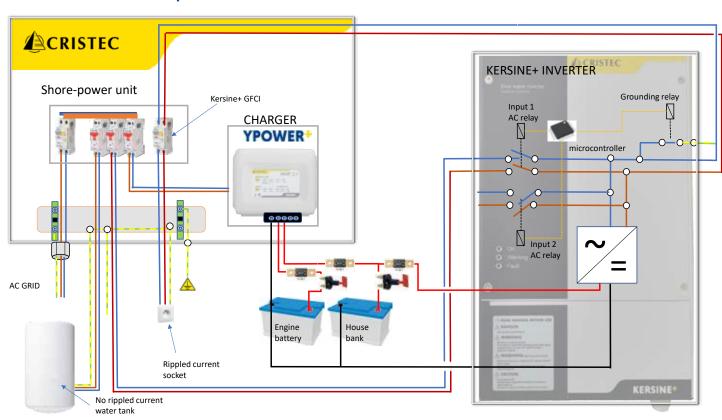
ON/OFF remote command P/N : KERS-ON-OFF

Parallel mode and 3-phase voltage mode, CAN address

Kersine can handle up to 4 units for parallel mode. The goal is to provide up to 14kVA of power. You can also connect 3 units to provide a 3-phase voltage architecture. In case of parallel mode or 3-line voltage mode, it is mandatory to connect all pure sine wave inverters together with RJ45 standard network cables and CAN-Bus cables.



Installation example









9.4/10 Repairability index



Presentation

The aim of inverters is to convert batteries direct voltage (12, 24 or 48VDC) into high quality 230VAC/50Hz alternating voltage which can be used for all electrical appliances (115VAC/60Hz or 230VAc/60Hz on request). The SOLO digital sinewave inverter is the ultimate solution fulfilling the highest requirements in terms of comfort, safety and reliability. Solo converters are Low Frequency technology which provide simplicity and high peak power overload.



Significant overload

SOLO inverters offer significant overload capacity for starting surges: more than 2 times the nominal power during 5 seconds.



Pure sinewave

Thanks to their sinusoidal signal without harmonic distortion, your devices are protected and energy loss is reduced.



High efficiency

SOLO inverters have high efficiency (>93%) and low stand-by consumption (around 1%).



High reliability

They meet the highest requirements in terms of comfort, safety and reliability in a limited size and weight.



Battery protection on stop

SOLO have a deep discharge battery protection that shutoff the inverter when battery voltage reaches 87% of nominal. It automatically restarts when nominal voltage is back.

SOLO DC-AC INVERTERS



Part Number	SEEL006054B	SEEL006056B	SEEL006072	SEEL006088	
Model*	12V/200W	12V/400W	12V/800W	12V/2000W	
Technical features					
Battery tension	12VDC				
Input voltage	10.5 - 16VDC				
Nominal power	200W	400W	800W	2000W	
Power 30 minutes @ 25°C (77°F)	275W	500W	1000W	2100W	
Power 5 secondes @ 25°C (77°F)	450W	1000W	2200W	5000W	
Standby / Idle power	0.3 /2.4W	0,4 /4.6W	0,7/10W	0.7/16W	
Maximum efficiency	93%	93%	93%	92%	
Output voltage	Sine wave 230VAC +/-5% (115V +/-5%)				
Frequency	50 Hz +/- 0.05 % (60 Hz +/-0.05%)				
Cooling (forced ventilation)	From 45° C (113° F)				
Overheating protection					
Overload protection	Yes				
Short circuit protection					
IP protection index	IP 30 IP 20			IP 20	
Cos φ max	0.1-1				
Casing					
Dimensions	163 x 142 x 84 mm (6.4 x 5.5 x 3.3 in)	240 x 142 x 84 mm (9.4 x 5.5 x 3.3 in)	428 x 142 x 84 mm (16.8 x 6.4 x 3.3 in)	399 x 273 x 84 mm (15.7 x 10.7 x 3.3 in)	
Weight	2.4 Kg (4.4 lb)	4.5 Kg (8.8 lb)	8.5 Kg (17.6 lb)	19 Kg (41.8 lb)	
Options					
Remote control with 5 meters cable switch P/N: SEEL007130	No		SEEL007130		



Part Number	SEEL006050B	SEEL006052B	SEEL006074	SEEL006090	
Model*	24V 300W	24V 500W	24V 1000W	24V 2000W	
Technical features					
Battery tension		24\	/DC		
Input voltage	21 - 32VDC				
Nominal power	300W	500W	1000W	2000W	
ower 30 minutes @ 25°C (77°F)	350W	600W	1300W	2400W	
Power 5 secondes @ 25°C (77°F)	650W	1200W	2800W	5200W	
Standby / Idle power	0.5/3.5W	0.6 /7.2W	1.2/13W	1.2/16W	
Maximum efficiency	94%	94%	94%	94%	
Output voltage	Sine wave 230V +/-5% (120V +/-5%)				
Frequency	50 Hz +/- 0.05 % (60 Hz +/-0.05%)				
Cooling (forced ventilation)	From 45° C (113° F)				
Overheating protection					
Overload protection	Yes				
Short circuit protection	<u>] </u>				
IP protection index	IP 30 IP 20			IP 20	
Cos φ max	0.1-1				
Casing					
Dimensions	163 x 142 x 84 mm (6.4 x 5.5 x 3.3 in))	240 x 142 x 84 mm (9.4 x 5.5 x 3.3 in)	428 x 142 x 84 mm (16.8 x 6.4 x 3.3 in)	399 x 273 x 84 mm (15.7 x 10.7 x 3.3 in)	
Weight	2.6 Kg (4.6 lb)	4.5 Kg (8.8 lb)	8.5 Kg (17.6 lb)	18 Kg (39.8 lb)	
Options					
Remote control with 5 meters cable switch P/N: SEEL007130	No		SEEL007130		

SOLO DC-AC INVERTERS

48V

Part Number	SEEL006954	SEEL008368		
Model*	SOLO 48V 300W	SOLO 48V 500W		
Technical features				
Battery tension	48VDC			
Input voltage	42 - 64VDC			
Nominal power	300W	500W		
Power 30 minutes @ 25°C (77°F)	400W	700W		
Power 5 secondes @ 25°C (77°F)	1000W	1400W		
Standby / Idle power	1.1 /5.2W	1.5/12W		
Maximum efficiency	94%	94%		
Output voltage	Sine wave 230V +/-5% (120V +/-5%)			
Frequency	50 Hz +/- 0.05 % (60 Hz +/-0.05%)			
Cooling (forced ventilation)	From 45° C (113° F)			
Overheating protection				
Overload protection	Yes			
Short circuit protection				
IP protection index	IP 30			
Cos φ max	0.1-1			
Casing				
Dimensions	163 x 142 x 84 mm (6.4 x 5.5 x 3.3 in)	240 x 142 x 84 mm (9.4 x 5.5 x 3.3 in)		
Weight	2.6 Kg (4.8 lb)	4.5 Kg (8.8 lb)		
Options				
Remote control with 5 meters cable switch P/N: SEEL007130	No			
Standby system (1 to 20W)	No	Yes		

