



Operating principle

Developed for professional use, in harsh environments, KERSINE inverters offer up to 3,6kVA power. Thanks to their High Frequency 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.).



Temperature withstand

Kersine inverters deliver their rated power at 25°C, minimum 80% power from 40°C and minimum 60% from 55°C according to models.



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 availability 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.

Part Number	KERS12-230/2400	KERS12-230/3600	KERS24-230/2400	KERS24-230/3600	KERS48-230/2400	KERS48-230/3600
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	300A		150A		75A	
Recommended lead-type battery bank	200Ah	300Ah	100Ah	150Ah	50Ah	75Ah
Recommended lithium batteries (LiPOWER+)	LIP12-100-BMS	LIP12-200-BMS	LIP24-100-BMS	LIP24-200-BMS	LIP48-100-BMS	
Consumption without load	30W					
Consumption in sleep mode via Bluetooth	5W					
Consumption in OFF mode (switch OFF)	20mW					
Efficiency	92%					
Input fuse	400A		200A		100A	
AC Output						
Voltage range	230VAC +/- 5%					
Frequency selectable	50/60Hz					
Rated Power at 25°C / 77°F	2000W	3000W	2000W	3000W	2000W	3000W
Power at 40°C / 104°F	1800W	2400W	1200W	3000W	2000W	3000W
Power at 55°C / 131°F	1600W	1800W	1600W	2400W	1800W	2400W
Peak power (3s at 25°C / 77°F)	3000W	4500W	3000W	4500W	3000W	4500W
Earth relay	1 x 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 Input						
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

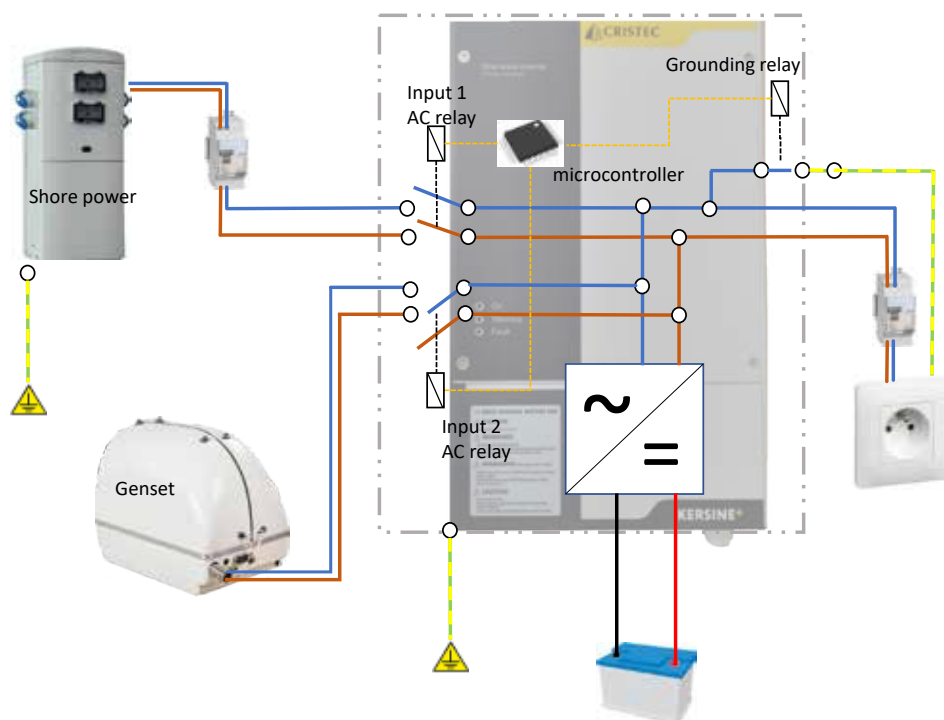
Part Number	KERS12-115/2000	KERS12-115/3000	KERS24-115/2400	KERS24-115/3600	KERS48-115/2400	KERS48-115/3600
Model	12VDC 2000VA	12VDC 3000VA	24VDC 2400VA	24VDC 3600VA	48VDC 2400VA	48VDC 3600VA
DC Input						
Voltage	10.5V - 16V		21V - 32V		42V - 64V	
Maximum current	300A		150A		75A	
Recommended lead-type battery bank	200Ah	300Ah	100Ah	150Ah	50Ah	75Ah
Recommended lithium batteries (LiPOWER+)	LIP12-100-BMS	LIP12-200-BMS	LIP24-100-BMS	LIP24-200-BMS	LIP48-100-BMS	
Consumption without load	30W					
Consumption in sleep mode via Bluetooth	5W					
Consumption in OFF mode (switch OFF)	20mW					
Efficiency	92%					
Input fuse	400A		200A		100A	
AC Output						
Voltage range	120VAC +/- 5%					
Frequency selectable	50/60Hz					
Rated Power at 25°C / 77°F	1600W	2400W	2000W	3000W	2000W	3000W
Power at 40°C / 104°F	1400W	2200W	2000W	3000W	2000W	3000W
Power at 55°C / 131°F	1200W	1800W	1800W	2400W	1800W	2400W
Peak power (3s at 25°C / 77°F)	3000W	3000W	3000W	3000W	3000W	3000W
Earth relay	1 x 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 Input						
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Casing						
Length, height, depth / Weight	270 x 410 x 130mm (10.6 x 16.1 x 5.1 in) / 7.4kg (16.3 lb)					
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	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	KERS48-115/2400-REL	KERS48-115/3600-REL

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