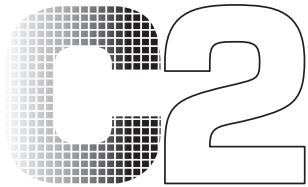




L'Énergie Sans Limite !  
Safe Energy for Life !



## Renewables energies



### Nomad Combo

From 1000 to 5000 VA

**C2 Nomad Combo is an inverter with an integrated charger : a perfect solution to provide electric independence to extreme areas such as boats, isolated areas, and motorhomes.**

#### A smart solution dedicated to many applications



The versatile C2 Combo Nomad is an inverter / charger, combining functions of DC / AC converter (inverter) and battery charger (solar and / or sector). It offers an uninterruptible power support with portable size in numerous environments. It accepts several types of supply : general utility, generator and photovoltaic panel.

C2 Nomad Combo charges batteries and provide 230V to common household appliances. Thanks to solar energy, it can recharge the batteries even in the event of a long power cut.

#### A reliable and effective technology

C2 Combo Nomad has unique technical characteristics :

- High-Freq. with Galvanic Isolation Design: Battery (DC) isolated with Output (AC) by transformer
- Compatible with Inductive loads : motor, air-conditioner, micro-wave, TV, Fluorescent lamp
- High charging power: up to 30A from utility; and up to 50A from solar PV
- High efficiency (90 - 93%)

For maximum safety and reliability in all circumstances, a conformal coating is applied to C2 Combo Nomad, thus protecting it from wear due to harsh environment conditions. It is also equipped with multiple protections against overloads, overheating, short circuits and reverse polarity.

#### Practical design

Designed to be wall mounted, this model is easy to set up and use. A quick install is printed on the front face. Plus, all the technical details you would need are in the user guide.

C2 Nomad Combo is user-friendly :

- LCD screen and a simple control panel on the front
- Cold start feature if no power supply
- UPS automatic restart when mains power is restored
- Parallel operation with up to 4 units only available for 4KVA/5KVA (option)



Pure Sinewave



LCD screen



High Efficiency  
(90-93%)



Remote control  
software

## Adjustable battery number & backup time

Externally connected, the number and the type of batteries can be varied depending on the desired backup time (see backup time table below). Depending on the application field, it is possible to connect standard lead-acid batteries (AGM type), or cyclic batteries.

Models	Load (VA)	Number of batt.	Backup time @ 12Vdc 100Ah (min)*	Backup time @ 12Vdc 200Ah (min)*
1KVA	100	1	766	1610
	500	1	112	269
	1000	1	50	112
2KVA	200	2	766	1610
	1000	2	112	269
	2000	2	50	112
3KVA	300	2	449	1100
	1500	2	68	164
	3000	2	28	67
4KVA	400	4	766	1610
	2000	4	112	269
	4000	4	50	112
5KVA	500	4	613	1288
	2500	4	90	215
	5000	4	40	90

\* Values indicatives

### Optimized battery performance

C2 Nomad Combo provides a state-of-the-art charger which optimizes battery performances. In addition, the total efficiency is between 90 and 93%. Thanks to these features, backup time is extended and user experience improved.

### Photovoltaic panels

C2 Nomad Combo allows you to connect one or more solar panels and batteries that will power the connected loads depending on the available light.



## Intuitive LCD screen

C2 Nomad Combo status is seen at a glance on an intuitive LCD screen. The inverter/charger is controlled by a simple control panel on the front with 3-4 buttons: charging current based on applications, AC/Solar input priority, input voltage range depending on appliances.

## Configurable AC/Solar priority source via LCD setting

It is easy to set up the AC/Solar input and output source priority. Depending on the environment, this setting maximize C2 Nomad Combo performances.

Examples of AC/Solar priority :

1) When utility and solar are available, battery charged from solar source, ICHG=ISC, load powered from solar and battery, the Max. ISC increases to 50Amps if solar panel with enough energy. Output source and charger source will be turned to utility side in case solar panel without enough energy and battery voltage down to pre-alarm level.

2) When utility and solar are available, battery charged from solar, ICHG=ISC, load powered from utility, Max. ISC increases to 50Amps if solar panel with enough energy. Charger source will be turned to utility side in case solar panel without enough energy.

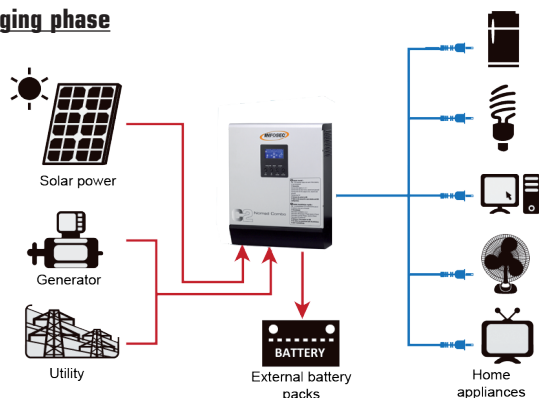
3) When utility and solar are available, battery charged from solar, ICHG=ISC, load powered from utility, Max. ISC increases 50Amps if solar panel with enough energy. Charger source will be turned to utility side in case solar panel without enough energy.



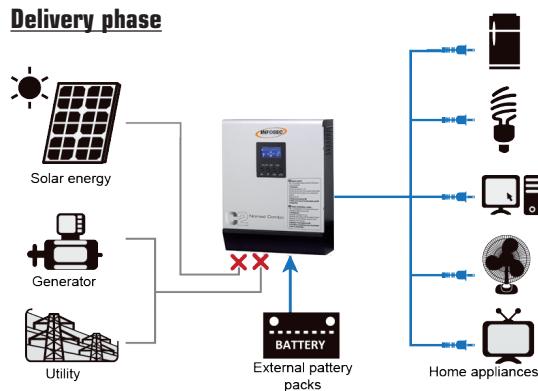
## BASIC SYSTEM ARCHITECTURE

### 2 working steps : charging phase and delivery phase.

#### Charging phase



#### Delivery phase



— Battery charging circuit  
— Power circuit applications

## APPLICATION EXAMPLES



### Nautical environment

Docked, the batteries are recharged from the mains. For your long journeys, the converter C2 can recharge the batteries via a solar panel.

The installation of C2 on board will allow you to use any type of electrical equipment possible: fridge, microwave, DVD player, hairdryer, etc. Your C2 can easily convert your voltage from 12V or 24V to 230 V/50 Hz. And you will take all your home comforts wherever you go!



### Remote locations and camper vans

Some locations are not well connected to utilities and power is not always available : in the mountains, or in camper vans, or worksite huts, for example, power is needed because they have to regularly move from a location to another.

C2 Nomad Combo provides smart power. The user needs only calculate the total load and the needed backup time.



### Inductive load

A typical UPS is not suitable to supply an inductive load such as a motor, an air conditioner, or a fluorescent lamp. Under these conditions, the C2 Nomad Combo provides a reliable and effective solution. For example, an engine installed in an inaccessible area can function normally.



### Long backup time

To provide a long backup time to a low load, C2 Nomad Combo is the best solution.

For instance, a pharmacist needs to guarantee power supply of a refrigerator containing vaccines and medicines in case of power failure for 48 hours. The C2 Nomad Combo will be the most flexible and economical solution as the number and type of batteries are adjustable. In addition, it is possible to combine a solar panel to increase backup time.

## CONFIGURATION EXAMPLES

### Load 750W - Backup time 5H

#### Inverter/Charger

- C2 Nomad Combo 1000 VA

#### Batteries

- 4 lead-acid batteries 12V, 100 Ah (Parallel connection)

#### Solar panels recommended (not supplied) :

- Modèle : 85W / 17.6V / 4.83A
- Quantity :
  - 1 panel for a weekly recharge
  - 2 panels for a daily recharge

### Load 2000W - Backup time 2H30

#### Inverter/Charger

- C2 Nomad Combo 3000 VA

#### Batteries

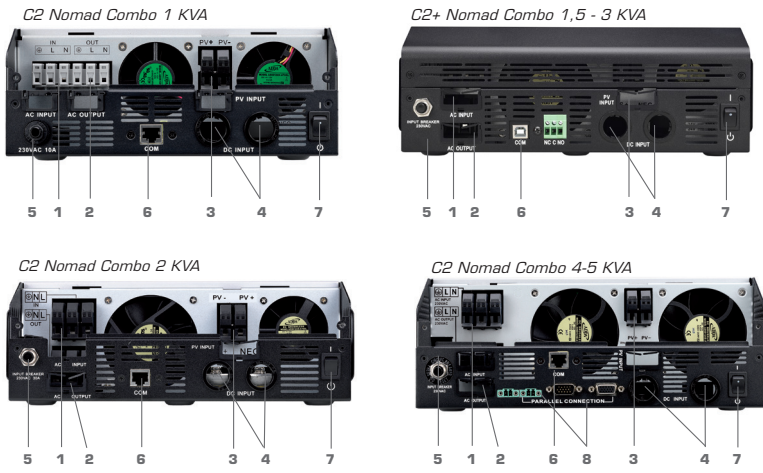
- 6 lead-acid batteries 12V, 100 Ah

#### Solar panels recommended (not supplied) :

- Model : 260W / 30.9V / 8.42A
- Quantity :
  - 1 panel for a weekly recharge
  - 2 panels for a daily recharge

# CONNECTION

1. AC input
2. AC output
3. PV input
4. Battery input
5. Fuse
6. Communication port
7. Power On / Off switch
8. Parallel port (option)



Nomad  
Combo

From 1000 to 5000 VA

# TECHNICAL CHARACTERISTICS

C2 Nomad combo 1000-12V	C2+ Nomad combo 1500-12V	C2+ Nomad combo 1500-12V	C2 Nomad combo 2000-24V	C2+ Nomad combo 3000-24V	C2 Nomad combo 4000-48V	C2 Nomad combo 5000-48V
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## GENERAL SPECIFICATIONS

Wave form	Pure sine wave						
Power	1000 VA	1500 VA	1500 VA	2000 VA	3000 VA	4000 VA	5000 VA
Power factor	0,8	0,8	0,8	0,8	0,8	0,8	0,8

## PHYSICAL

Dimensions - WxLxH (mm)	95 x 240 x 316	100 x 272 x 355				120 x 295 x 468	
Net weight (kg)	5.0	6.0	6.5	6.35	6.9	10	10

## INPUT

Voltage	230 VAC						
Voltage range	170-280 VAC (1 PC) 90-280 VAC (home appliances)						
Frequency	50 Hz/60 Hz (auto detection)						
Maximum efficiency	93%						
Transfer time	10 ms (1 PC) / 20 ms (home appliances)						

## OUTPUT (battery mode)

AVR	230VAC ± 5%						
Frequency	50 Hz/60 Hz (auto detection)						

## BATTERY

Battery voltage	12 VDC	12 VDC	24 VDC	24 VDC	48 VDC		
Floating Charge Voltage	13.5 VDC	13.5 VDC	27 VDC	27 VDC	54 VDC		
Low battery warning	10.5 VDC	10.5 VDC	21 VDC		42 VDC		
Stop voltage	10 VDC	10 VDC	20 VDC		40 VDC		
Overcharge Protection	15 VDC	16 VDC	32 VDC	30 VDC	32 VDC	60 VDC	
Maximum charge current	10 A or 20 A	60 A	60 A	20 A or 30 A	60 A	20 A or 30 A	

## SOLAR CHARGER

Charging current	50A						
Operation voltage range	15 ~18Vdc	15 ~18Vdc	30 ~32Vdc			60 ~72vdc	
Maximum PV Array Open Circuit Voltage	30 VDC	30 VDC	60 VDC			90 VDC	
Standby power Consumption	1 W			2 W			

## DISPLAY AND ALARMS

Visual indicators	LCD screen						
Sound Alarm	Alarm						

## MANAGEMENT / COMMUNICATION

Communication	Communication ports & WatchPower software (supported by Windows 7, 8 & 10, Linux, Unix & MAC)						
Parallel connection	Optional					Yes	

## ENVIRONMENT

Ideal environment	5% to 95% relative humidity (without condensing)						
Working mode temperature	from 0°C to 55°C						
Storage temperature	-15°C to 60°C						

## NORMS

Standard	CE RoHS						
EMC (Electromagnetic)	IEC 61000-6-4:2006; IEC 61000-6-2:2005; IEC 61000-3-2:2005; IEC61000-3-3:2008; IEC61000-4-2:2008; IEC61000-4-3:2006; IEC61000-4-4:2012; IEC61000-4-5:2005; IEC61000-4-6:2008; IEC61000-4-8:2009; IEC61000-4-11:2008;						
Low voltage (Safety)	EN 60950-1:2006						

## SALES INFO

Warranty	2 years						
PN	63205	63223	63224	63206	63225	63208	63209

## Communications solutions and remote management

- RJ45 (RS 232) communication ports and dry contacts
- WatchPower software

## Package content

- C2 Nomad Combo or C2+ Nomad Combo
- User guide
- RJ45 Communication cable x 1 (for 1000, 2000, 4000 & 5000 VA models)
- USB Communication cable x 1 (for 1500 & 3000 VA models)
- Watchpower software (to download)

## Warranty



2-year warranty against manufacturing defects under normal conditions and compliance with precautionary measures. Warranty to be taken out on [www.infosec-ups.com](http://www.infosec-ups.com) within 10 days of purchase.



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