



L'Énergie Sans Limite !  
Safe Energy for Life !



## Networks & Critical Apps, Industrial Environments

**E4** LCD  
**Pro**

From 1 to 10 k VA

**E4 LCD Pro range offers an excellent electrical security level and the main features for the protection of your essential and strategic loads.**

On Line Double Conversion technology  
High Frequency  
microprocessor-controlled

### The most reliable technology

The microprocessor-controlled On Line Double Conversion technology, delivers a pure sinewave output current for applications with an essential role. Models equipped with this technology have the latest generation IGBT switch on their inverter and rectifier circuits.

The output power factor is optimal, reaching 0.9 on the whole range. Monitoring the UPS through a microprocessor offers a wide input voltage range, a high input power factor, a low harmonic distortion and a noticeable reduction of noise intensity.

### Features fit for the most demanding needs

E4 LCD Pro range features the requested technical specifications designed to offer an optimal level of performance that fits to the most varied needs. Service continuity is guaranteed in any circumstance, even when the UPS is set to Eco mode, or during maintenance operations with the internal manual bypass set during the interventions (from 5k to 10k VA). The Emergency Power Off feature (from 5k to 10k VA) guarantees the maintenance staff's safety and the protection of its environment.

Very low distortion of input current  
Input Power Factor correction  
up to >0.99%  
Output power factor of 0.9

For the most disturbed or  
demanding environments:  
Extended backup time available  
on S models with external Battery Bank



E4 LCD Pro  
1-3 k VA

E4 LCD Pro  
5-10 k VA



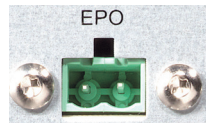
# SECURITY AND SERVICE CONTINUITY

## A safe solution

- Protection against any wiring default
- Reliability: automatic control of the load, the input voltage and the internal status of the UPS
- Automatic testing during the initialization of the device
- Protection of the internal power components

## Emergency Power Off (EPO) Function

This port is dedicated to the installation of the Emergency Power Off Function (EPO) for staff's safety and equipment protection, allowing to immediately and completely shut down the UPS (models from 5k to 10k VA).



## Cold-start function

In case of an emergency, this feature allows to overcome a total shutdown by starting the UPS thanks to its batteries.

## ECO functioning mode allowing to save energy



Eco mode allows to reduce the energy consuming and costs, thus reaching a 90% efficiency.

This feature allows the unit to supply the connected load directly from the mains while maintaining the UPS device fully operational in case a failure or an important voltage fluctuation should occur, thus guaranteeing a continuous supply of the system.

This functioning mode supplies the UPS through the static bypass and allows a relevant return to the Online Double Conversion if necessary.

E4 LCD Pro UPS devices from 1 to 3 kVA also feature an Advanced Eco mode allowing to reach a 95% efficiency.

# USER-FRIENDLY WITH COMMUNICATION FEATURES

## Easy to use LCD screen



- Sharp and user friendly: status indicators and real-time parameters information
- Intuitive LCD display on the front panel: direct access to the UPS settings for a quick modification of the operational modes (output voltage settings...)
- Frequency setting on 50 or 60 Hz or auto-detection (easily set from the LCD screen of the device)

## Communication interfaces

Several **communication interfaces** allow E4 LCD Pro UPS devices to be remotely controlled thanks to the InfoPower software. An uninterrupted monitoring of the UPS status and its connected applications is then possible:

- The **USB port** or **RS232** allow to use communication protocols of IT infrastructures, Data Centers or telecommunication networks.
- An **SNMP port** allows to add an SNMP card (as an option) managed by a software installed on a server.

## Remote management software

The Infopower management software is provided as a standard with the E4 LCD Pro UPS:

- Setting the time of initialization and shutdown of the device
- Recording of the data and events allowing a daily maintenance
- E-mail messaging to manage the status of the UPS at any time from the local network
- Automatic files closing by the UPS when the mains is not available: protection of the data of all the computers of a same IT network
- Intuitive graphic interface: allows to monitor the system's status, the key indicators, the events history...

## By-pass manuel de maintenance

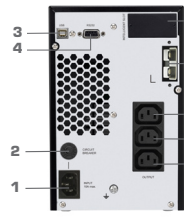
- Allows to provide connected equipment with a permanent voltage during maintenance through the rotary switch and therefore avoids the IT network's shutdown.
- As a standard on the E4 LCD Pro UPS range from 5 to 10 kVA.
- As an external option on E4 LCD Pro UPS devices under 5 kVA.



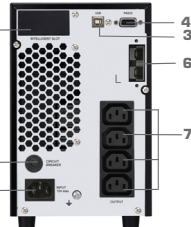
# CONNECTIONS AND BATTERIES

## A connectivity designed for several needs

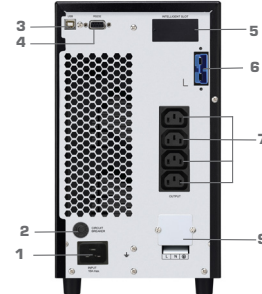
1. Input
2. Input Circuit Breaker
3. USB communication port
4. RS 232 communication port
5. SNMP slot
6. External batteries connection
7. Outlets
8. Input terminal
9. Output terminal
10. EPO connector
11. Maintenance By-pass



E4 LCD Pro 1000



E4 LCD Pro 1500 & 2000



E4 LCD Pro 3000



E4 LCD Pro 5000 to 10k VA

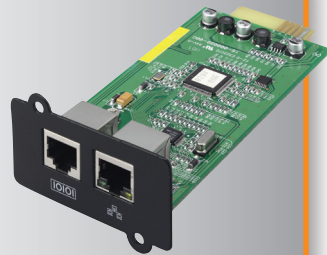
## OPTIONS

### Communication options

#### SNMP Agent

Using an SNMP agent simplifies the management (locally and on several places) of **E4 LCD Pro** and of the network's supply thanks to its setting and programming features:

- Connection to the Ethernet network and identification by IP address
- Configuring and programming extensions and restart of the system on a weekly (or other) basis ...
- UPS configuration locally or remotely



#### AS400 Dry Contacts Card

The AS400 communication card sends dry contacts to report the alarms triggered in the UPS (for centralized technical managements for example).

Depending on the applications, dry contacts can be normally open or normally closed.

#### EMD

This probe is meant for detecting the environmental conditions of the UPS and allows from a distance to monitor the temperature and the moisture rate of the room. This probe is connected to the SNMP card, and can also be used to send dry contacts, this being compatible with security or alarms systems.



#### RS485 Card

An RS 485 card can be added as an option in order to allow the E4 LCD Evolution UPS to communicate with installations using industrial protocols on long distance.

### Isolation transformer

An isolation transformer at the input and the output providing the system a complete galvanic isolation between the upstream and downstream circuits. The equipment therefore adapts perfectly to all neutral systems upstream as much as downstream.

### BMe

For models from 1000 to 3000 VA, E4 LCD Pro is compatible with the External Maintenance Bypasses BMe 1 with IEC or FR/Schuko outlets.



During maintenance works on a UPS device, BMe1 guarantees, through its independent line, the continuous supply of the connected equipment.

This option can be installed in a few minutes and guarantees the staff's safety without any service interruption.

### Extended backup time

In order to benefit from a prolonged backup-time in disturbed or demanding environments, external battery modules can be added to, **E4 LCD Pro** (option).

Several types of battery banks exist according to the type of batteries required, and also depending on the place's configuration. The wide and modular battery banks offer allows to answer most of the needs.

S versions (Extended Backup Time) are delivered without internal batteries, but with external battery banks.

From 1000 to 3000 VA, an external battery charger can also be added to a standard model to allow increasing the number of battery banks that can be configured on the UPS (up to 4).



# TECHNICAL SPECIFICATIONS

E4 LCD PRO 1000 (S)	E4 LCD PRO 1500 (S)	E4 LCD PRO 2000 (S)	E4 LCD PRO 3000 (S)	E4 LCD PRO 5000 (S)	E4 LCD PRO 6000 (S)	E4 LCD PRO 8000 (S)	E4 LCD PRO 10000 (S)
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## From 1 to 10kVA

### GENERAL CHARACTERISTICS

Technology	On Line Double Conversion							
Power (VA)	1000 VA	1500 VA	2000 VA	3000 VA	5000 VA	6000 VA	8000 VA	10000 VA
Power (W)	900 W	1350 W	1800 W	2700 W	4500 W	5400 W	7200 W	9000 W
Power factor	0,9							

### PHYSICAL CHARACTERISTICS

Standard	Dim. D x W x H (mm) - UPS	282 x 145 x 220	397 x 145 x 220	421 x 190 x 318	369 x 190 x 688	442 X 190 X 688
	Net weight (kg)	9,8	17	27,6	72	82
Long Backup time (S)	Dim. D x W x H (mm) - UPS	282 x 145 x 220	397 x 145 x 220		369 x 190 x 318	442 X 190 X 318
	Net weight (kg)	4,1	6,8	7,4	21	23

### TECHNICAL INPUT CHARACTERISTICS

Low voltage range	Low Line transfer (based on load percentage : 100%-80% / 80%-70% / 70%-60% / 60%-0%)	180 VAC / 160 VAC / 140 VAC / 120 VAC +/- 5%	110 VAC +/- 3% at 50% load 176 VAC +/- 3% at 100% load
	Low Line comeback	195 VAC / 175 VAC / 155 VAC / 135 VAC +/- 5%	120 VAC +/- 3% at 50% load 186VAC +/- 3% at 100% load
High voltage range	High Line transfer (based on load percentage : 100%-80% / 80%-70% / 70%-60% / 60%-0%)	300 VAC / 280 VAC +/- 5%	300 VAC +/- 3%
	High Line comeback	290 VAC / 270 VAC +/- 5%	290 VAC +/- 3%
Frequency range		40 Hz ~ 70 Hz	50 Hz : 46 Hz ~ 54 Hz or 60 Hz : 56 Hz ~ 64 Hz
Power factor		> 0,99 at 100% load	> 0,99 at 100% load

### TECHNICAL OUTPUT CHARACTERISTICS

Voltage	200/208/220/230/240 VAC	208 / 220 / 230 / 240 VAC
AC voltage regulation (Batt mode)	+/- 1%	+/- 1%
Frequency range (Synchronized range)	50 Hz : 47 ~ 53 Hz or 60 Hz : 57 ~ 63 Hz	50 Hz : 46 Hz ~ 54 Hz or 60 Hz : 56 Hz ~ 64 Hz
Frequency range (Batt mode)	50 Hz +/- 0,5 Hz or 60 Hz +/- 0,5 Hz	50 Hz +/- 0,1 Hz or 60 Hz +/- 0,1 Hz
Current crest ration		3 : 1
Harmonic distortion	<= 3% THD (Linear Load); <= 6% THD (Non-linear Load)	
Transfer time	Line mode to battery mode	0 ms
	Inverter to Bypass	4 ms (Typical)
Waveform	Pure sinewave	
Output outlets IEC 10A	3	4
Output terminal block	no	yes

### EFFICIENCY

AC mode	88%	89%	90%	89%	90%
Battery mode	83%	85%	88%	88%	89%
Eco mode	94%-95%				

### BATTERY

Standard model	Battery type	12 V / 9 AH			12 V / 9 AH		
	Number	2	4	6	16	20	
	Typical recharge time	4 hours recover to 90% capacity			9 hours recover to 90% capacity		
	Charging current (max)	1A			1A (max 2A)		
Long backup time model (S)	Backup time	from 5 to 30 minutes depending on the connected load					
	Typical recharge time	Depending on the capacity of external batteries					
	Charging current (max)	1A/2A/4A/6A			4A (max 6A)		

### DISPLAY

LCD screen	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator.
Audible alarms	Battery mode, Low battery, Overload, Fault

### BYPASS

Static bypass	Yes
Manual bypass	Option Yes

### MANAGEMENT / COMMUNICATION

Communication	USB & RS232 port and Infopower included software (support Windows family, Linux, Unix and MAC) Optional SNMP 1 : power management from SNMP manager (VMware® compatible) and web browser
EPO Connector	No Yes

### ENVIRONMENT

Humidity	20 - 90% relative humidity @ 0-40° non condensing	0 - 95% relative humidity @ 0-40° non condensing
Operating Altitude	Up to 1000 m above sea level (> 1000 m 1% derating for every 100 m)	
Noise level	Less than 50dBA @ 1 meter	Less than 55dBA @ 1 meter Less than 58dBA @ 1 meter
Heat dissipation max	141 W / 481,11 BTU/h 256 W / 873,5 BTU/h 348 W / 1187,41 BTU/h	667 W / 2276,45 BTU/h 960 W / 3276,45 BTU/h

### NORMS

Standard	CE RoHS	
EMC (Electromagnetic compatibility)	EN 62040-2:2006+AC:2006; EN 61000-3-2:2006+A1:2009+A2:2009; EN 61000-4-2:2009; EN 61000-4-3:2006+A2:2010; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2014; EN 61000-4-8:2010; EN 61000-2-2:2002	EN 62040-2 : 2006 ; EN 61000-2-2 : 2002; EN61000-4-2 : 2009; EN61000-4-3:2006 +A1:2008 +A2:2010; EN61000-4-4:2004+A1:2010; EN61000-4-5:2006; EN61000-4-8:2010
Low voltage (Safety)	EN 62040-1:2008	

### SALES INFO

Warranty	2 years						
Gencods - standard versions	3700085	3700085	3700085	3700085	3700085	3700085	3700085
	672303	672747	672310	672327	672662	672679	672686
Gencods - Long backup time version (S)	3700085	3700085	3700085	3700085	3700085	3700085	3700085
	672365	672754	672372	672389	672709	672716	672723

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### ARMOIRES DE BATTERIE

Number & type of batteries	6 x 12V9Ah	8 x 12V9Ah	12 x 12V9Ah	32 x 12V9Ah	40 x 12V9Ah
Dimensions - D x W x H (mm)	397x 145 x 220	397 x 145 x 220	421 x 190 x 318	442 x 190 x 688	442 x 190 x 688
Net weight - kg (empty battery bank)	22	27	42	95	115
Reference	67277	67279	67281	67283	67284

## Communications solutions and remote management

USB & RS232, SNMP & EPO communication ports

Software :

- Simple user interface
- UPS startup and shutdown programming
- Data and events record enabling daily maintenance
- E-mail messaging to manage UPS status at all times via the local network
- Free download from the website

## Package content

- 1 UPS
- 1 input cable (1 to 3 kVA models)
- IEC 10A output cable (1 to 3 kVA models)
- 1 RS 232 cable
- 1 USB cable
- 1 battery cable (5k to 10kVA and S models)
- 1 user manual
- Infopower Software

## Options

Désignation	Réf
SNMP Card	61424
Dry contacts card	61454
RS 485 card	61439
BMe 1 IEC 1 to 3k	61440
BMe 1 FR 1 to 3k	61441
Additional battery banks	See chart
EMD detector	61452
External isolation transformer	NC

## Warranty

2-year warranty against manufacturing defects under normal conditions and compliance with precautionary measures.

Warranty to be taken out on our website within 10 days of purchase.



## Infosec Communication

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