INFOSEC™
UPS SYSTEM

L'Énergie Sans Limite !
Safe Energy for Life !
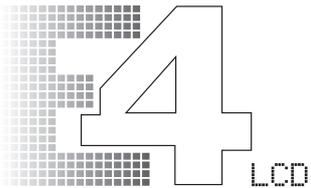
E4 LCD Pro
From 1 to 3 k VA

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.

E4 LCD Pro
1-3 k VA

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. Thank to the internal manual bypass and backup time (optional), service continuity is guaranteed in any circumstance.

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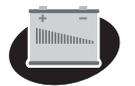> Output power factor of 0.9

WARRANTY 2 YEARS ANS GARANTIE

On Line Double Conversion Technology

LCD control screen

Remote control software

Up to 30 min. backup time (depending on connected load)

www.infosec-ups.com

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

⊙ 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-FRIENDLYNESS & COMMUNICATION

⊙ 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…)

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 applicatons 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 (free download on the website):
- 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…

CONNECTIONS AND BATTERIES
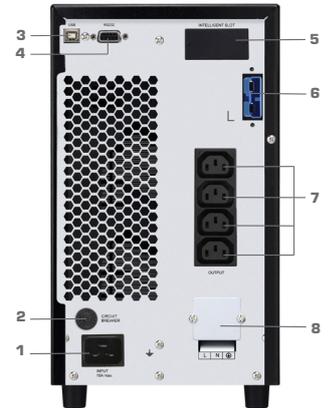
⊙ A connectivity designed for several needs

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
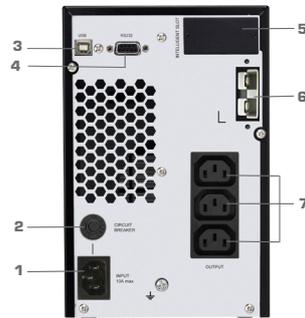
E4 LCD Pro 1000
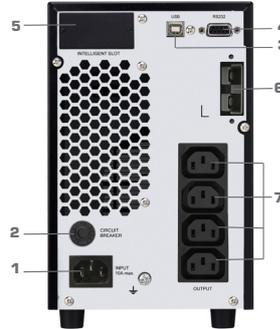
E4 LCD Pro 1500 et 2000

E4 LCD Pro 3000

OPTIONS

Communication options

SNMP I Pro Agent

Using an SNMP I Pro 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 applicatons, 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.

Modbus Card

A Modbus card can be added as an option in order to allow the E4 LCD Pro UPS to communicate with installations using industrial protocols on long distance.

Agent SNMP vm Minislot

The SNMP vm Minislot agent facilitates network UPS management and virtual environments (vmWare©, Hyper V©, etc.). Associated with the UPS Management software solution, it makes it possible to control the starting and stopping of the virtual servers and their associated equipment.

⊙ 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

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 equipement.

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 back-up-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 offers allows to answer most of the needs.

An external battery charger can also be added to allow increasing the number of battery banks that can be configured on the UPS (up to 4).

TECHNICAL SPECIFICATIONS

From 1 to 3 k VA

Communications solutions and remote management

USB & RS232, SNMP 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
- IEC 10A output cable
- 1 RS 232 cable
- 1 USB cable
- 1 user manual

Options

Désignation	Réf
SNMP Pro I Card	61156
SNMP vm Minislot Card	61142
Dry contacts card	61454
Modbus card	61439
BMe 1 IEC	61440
BMe 1 FR	61441
EMD detector	61452
External isolation transformer	NC
Smart Charger S - 24 VDC	61139
Smart Charger S - 48 VDC	61140
Smart Charger S - 72 VDC	61141

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.

WARRANTY 2 YEARS ANS GARANTIE

		E4 LCD PRO 1000	E4 LCD PRO 1500	E4 LCD PRO 2000	E4 LCD PRO 3000
GENERAL CHARACTERISTICS					
Technology		On Line Double Conversion			
Power (VA)		1000 VA	1500 VA	2000 VA	3000 VA
Power (W)		900 W	1350 W	1800 W	2700 W
Power factor		0,9			
PHYSICAL CHARACTERISTICS					
Standard	Dim. D x W x H (mm) - UPS	220 x 145 x 282	220 x 145 x 397		318 x 190 x 421
	Net weight (kg)	9.8	17		27.6
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%			
	Low Line comeback	195 VAC / 175 VAC / 155 VAC / 135 VAC +/- 5%			
High voltage range	High Line transfer (based on load percentage : 0%-80% / 80%-100%)	300 VAC / 280 VAC +/- 5%			
	High Line comeback	290 VAC / 270 VAC +/- 5%			
Frequency range		40 Hz ~ 70 Hz			
Power factor		> 0,99 at 100% load			
TECHNICAL OUTPUT CHARACTERISTICS					
Voltage		200/208/220/230/240 VAC			
AC voltage regulation (Batt mode)		+/- 1%			
Frequency range (Synchronized range)		50 Hz : 47 ~ 53 Hz or 60 Hz : 57 ~ 63 Hz			
Frequency range (Batt mode)		50 Hz +/- 0,5 Hz or 60 Hz +/- 0,5 Hz			
Current crest ration		3 : 1			
Harmonic distorsion		<= 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%
Battery mode		83%	85%		88%
Eco mode		94%-95%			
BATTERY					
Standard model	Typical recharge time	4 hours recover to 90% capacity			
	Charging current (max)	1A			
	Backup time	from 5 to 30 minutes depending on the connected load			
INDICATORS & ALARMS					
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			
MANAGEMENT / COMMUNICATION					
Communication		USB & RS232 port and Infopower included software (support Windows family, Linux, Unix and MAC) Optional SNMP Pro I : power management from SNMP manager (VMware© compatible) and web browser			
EPO Connector		No			
ENVIRONMENT					
Humidity		20 - 90% 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			
Heat dissipation max		141 W / 481,11 BTU/h	256 W / 873,5 BTU/h		348 W / 1187,41 BTU/h
NORMS					
Standard		CE RoHS			
EMC (Electromagnetic compatibility)		EN 62040-2: 2006+AC: 2006 ; EN 61000-3-2: 2014 (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)			
Low voltage (Safety)		EN 62040-1:2008 (1st Edition) + Am 1:2013			
SALES INFO					
Warranty		2 years			
PN - standard versions		67230	67274	67231	67232

E4 LCD Pro UPS devices from 1k to 3k VA are also available in 110V (LV) - Refer to our sales contacts.

	E4 LCD PRO 1000	E4 LCD PRO 1500	E4 LCD PRO 2000	E4 LCD PRO 3000
BACKUP MODULES				
Dimensions - D x W x H (mm)	220 x 145 x 397	220 x 145 x 397		318 x 190 x 421
Net weight - kg (empty battery bank)	22	27		42
PN	67277	67279		67281

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