

# **Networks & critical applications - Industrial Environments**



The entire range of E4 LCD Pro (S) a high level of electrical security, together with the essential features to protect your critical equipment.

# An advanced technology

Equipped with the On Line Double Conversion controlled by a microprocessor, the E4 LCD Evolution range delivers a perfect sinewave output current and provides thorough and effective protection of critical devices.

The output power factor is optimal, reaching 0.9, to provide high performance and efficiency for critical applications.

#### Smart features

- Cold start function: It enables an emergency situation involving a total power cut to be overcome by starting the UPS using batteries without the mains power supply.
- UPS controlled by a microprocessor: Among other advantages this control mode provides a wide range of input voltage (110 V to 300 V), an input power ratio of more than 95 %, little harmonic distortion and effective noise reduction.
- Energy saving ECO mode (1 to 3kVA versions): Efficiency
  of up to 97 % equates to energy and cost savings. In
  addition, a static bypass power supply via the UPS offers
  timely return to on-line double conversion if required.
- Emergency Power Off (EPO): This function ensures the safety of personnel and hardware in the event of fire or any other emergency situation by triggering the total and immediate shutdown of the UPS.





E4 LCD Pro 5-10 k VA





On Line Double Conversion Technology





Remote control



## Practical design



UPS status is seen at a glance on an intuitive LCD screen. The UPS is controlled by a simple control panel on the front with 3 or 4 buttons: ON/OFF, operating mode configuration, voltage setting, programmable outlet setting...

#### Communication

USB or RS 232 communication ports and SNMP interface enable an E4 LCD UPS to communicate with the various stations and IT servers it is protecting. The multiple communications function should be noted: USB or RS232 ports can therefore operate simultaneously with the SNMP interface.

## **TECHNICAL SPECIFICATIONS**

E4 LCD F	RO E4 LCD PRO	E4 LCD PRO					
1000 (	S) 1500 (S)	2000 (S)	3000 (S)	5000 (S)	6000 (S)	8000 (S)	10000 (S)

#### **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	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
time (5)	Net weight (kg)	4.1	6.8	7.4	21	23

#### **TECHNICAL INPUT CHARACTERISTICS**

Low voltage	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		
range	Low Line comeback	195 VAC / 175 VAC / 155 VAC / 135 VAC +/- 5%	120 VAC +/- 3% at 50% load 186 VAC +/- 3% at 100% load		
High voltage 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 H	z +/- 0,5 Hz or 60 Hz +/- 0	,5 Hz	50 Hz +/- 0,1 Hz or 60 Hz +/- 0,1 Hz			),1 Hz
Current crest ra	ation	3:1			3:1 (max)			
Harmonic distor	sion	<= 3% THD (Linear Load); <= 6% THD (Non-linear Load)						
Transfer time Line mode to battery mode Inverter to Bypass		0 ms			0 ms			
		4 ms (Typical), 10 ms (max.)			0 ms			
Waveform		Pure sinewave						
Output outlets I	EC standards	3	4	4	0	0	0	0
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**

	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)		
	Backup time	from 3 to 30 minutes deper			nding on the connected load		
Long backup	Typical recharge time	Depending on the capacity of external batteries					
time model (S)	Charging current (max)	1A/2A/4A/6A			4A (max 6A)		
DIODI AV							

## **DISPLAY**

LCD screen	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator.

## **AUDIBLE ALARMS**

Battery mode	Sounding every 4 seconds			
Low battery	Sounding every second			
Overload	Sounding twice every second			
Fault	Continuously sounding			

#### **MANAGEMENT / COMMUNICATION**

Communication	USB & RS232 port and Infopower included software (support Windows family, Linux, Unix and MAC)
Communication	Optional SNMP

### **ENVIRONMENT**

Humidity	20 -	90% relative humidity @ 0	)-40°	0 - 95% relative humidity @ 0-40°		
numuicy	non condensing			non condensing		
Operating Altitude	Up to 1000 m above sea level (> 1000 m 1% deterioration for every 100 m)					
Noise level	Less than 50dBA @ 1 meter			Less than 55dBA @ 1	Less than 58dBA @ 1	
Noise level				meter	meter	
	141 W /	256 W /	348 W /			
Heat dissipation max - HV (230 V)	481,11	481,11 256 W / 873,5 Btu/h		667 W / 2276,45 Btu/h	960 W / 3276,45 Btu/h	
	Rtu/h	0/3,3 Dtu/11	Rtu/h			

## NINDINE

INDINIO		
Standard	CE RoHS	CE RoHS, cTUVus
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+A1:2013	EN62040-1:2008

## **SALES INFO**

Warranty	2 years							
Gencods - standard versions	3700085672303	3700085672747	3700085 67231 0	3700085672327	3700085672662	3700085 67267 9	3700085672686	3700085 67269 3
Gencods - Long backup time version (S)	3700085672365	3700085672754	3700085 67237 2	3700085672389	3700085672709	3700085 67271 6	3700085672723	3700085672730

S models are long-autonomy UPS devices without internal batteries. E4 LCD Pro UPS devices are also available in 110V (LV) - Refer to our sales contacts.



## **Package content**

- 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.

# **Infopower software**

An E4 LCD Pro UPS can close files automatically on its own, if there is no power, thanks to the InfoPower

control software (supplied as standard), and in doing so save data



from all the PCs in a network.

The communication software also offers a graphic interface to view system status, various measurements, events log, etc.

# **Options**

Model	Ref
SNMP Card	61424
Dry contacts cards	61433
RS 485 Card	61439
BME 1 IEC	61440
BME 1 FR	61441
Additional battery bank	-
Environment measure device	61452

# Warranty

Two-year warranty





## **Infosec Communication**

4, rue de la Rigotière 44700 ORVAULT - FRANCE

Sales Contact

Tel: 02 40 76 11 77 commercial@infosec.fr