

Networks & critical applications - Industrial Environments



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

An advanced technology

From 1 to 10k VA

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. These models are equipped with the IGBT latest generation on their rectifier / inverter circuits

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 LIPS
- Static Bypass and internal maintenance Bypass from 5 to 10kVA



E4 LCD Pro E4 LCD Pro 1-3 k VA 5-10 k VA





On Line Double Conversion Technology



LCD Control screen



USB, RS232 & SNMP communication ports



software



Extended backup time version available

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.

Long-autonomy version (S version)

Exist in long-autonomy version, without an internal battery but with external battery packs,

GENERAL CHARACTERISTICS

Technology		On Line Double Conversion						
Power (VA)	1000 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 22	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 186VAC +/- 3% at 100% load		
	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

TESTIMIONE SOTT OF CHARACTERISTICS							
Voltage		200/208/220/230/240 VAC			208 / 220 / 230 / 240 VAC		
AC voltage regul	lation (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	e (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		
Current crest ra	ation	3:1					
Harmonic distor	sion	<= 3% THD (Linear Load); <= 6% THD (Non-linear Load)					
Transfer time	Line mode to battery mode	0 ms			0 ms		
mansier unie	Inverter to Bypass		4 ms (Typical)		0 ms		
Waveform		Pure sinewave					
Output outlets I	EC 10A	3 4			0		
Output terminal	block	no		yes	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			
Standard model	Typical recharge time	4 h	ours recover to 90% capa	city	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				
	Typical recharge time	Depending on the capacity of external batteries							
time model (S)	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	Sounding every 4 seconds
Low battery	Sounding every second
Overload	Sounding twice every second
Fault	Continuously sounding
1 date	continuously sounding

MANAGEMENT / COMMUNICATION

Communication	USB & RS232 port and Infopower included software (support Windows family, Linux, Unix and MAC)	
	Optional SNMP I: power management from SNMP manager (VMware compatible) and web browser	

ENVIRONMENT

Humidity		90% relative humidity @ 0)-40°	0 - 95% relative humidity @ 0-40°		
numury		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 /	11 W / 256 W /				
Heat dissipation max	481,11		1187,41	667 W / 2276,45 Btu/h	960 W / 3276,45 Btu/h	
	Rtu/h 873,5 Btu/h Rtu/h					

NURMS						
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+A1:2013	EN62040-1:2008				

SALES INFO

Warranty	2 years							
Gencods - standard versions	3700085 672303	3700085672747	3700085672310	3700085672327	3700085672662	3700085 67267 9	3700085672686	3700085 67269 3
Gencods - Long backup time version (S)	3700085 672365	3700085672754	3700085672372	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.



Communications solutions and remote management

USB & RS232, SNMP & EPO communication

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

Model	Ref
SNMP Card	61424
Dry contacts cards	61433
RS 485 Card	61439
BME 1 IEC from 1 to 3k	61440
BME 1 FR from 1 to 3k	61441
Additional battery bank	-
Environment measure device	61452
Warranty extension	-

Warranty

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

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



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