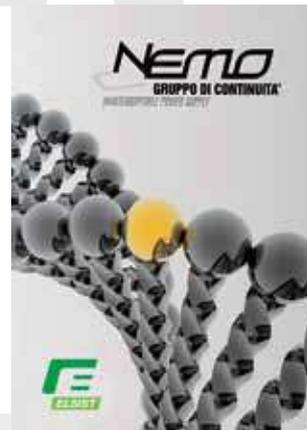


Nemo2.0



Uninterruptible Power Systems



What an UPS is?

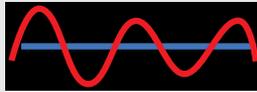
An Uninterruptible Power Supply (UPS) is a device connected between the electrical mains and the critical load. It allows any load (a computer, a workstation, a printer, an electrical system, etc.) to keep running for some time when the primary power source is lost. Moreover, it protects the load from any disturbance generated by the source. The UPS usually includes three main blocks:

RECTIFIER	it converts the AC input voltage into an intermediate DC voltage and charges the battery.
INVERTER	it converts the DC voltage into a filtered AC voltage to the load.
BATTERIES SET	they store energy when mains is present. when input source is lost they supply the load for a certain amount of time .

Technical Term	Symbol	Description
Volt	V	Voltage
Ampere	A	Current
Power Factor	$\cos \varphi$	The ratio of Real Power (kW) to Apparent Power (kVA)
Kilowatt	kW	Real Power (Volt x Ampere x Cos φ)
Kilovoltampere	kVA	Apparent Power (Volt x Ampere)
Frequency	Hz	Number of cycles per second

ELECTRICAL DISTURBANCES

Sometimes we experience electrical disturbances on the mains such as voltage fluctuations, spikes, flickering, blackouts that can disturb the correct operation of our systems or even cause them damages. There are various kind of electrical disturbances. Hereafter, we're listing the most common ones:



SAGS a sudden decrease of input voltage for a short time.
BROWNOUTS are steady decrease of input voltage for a long time. The load is still supplied but at a voltage below its tolerances.



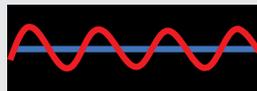
BLACKOUTS no power at all, in this condition the load is not supplied



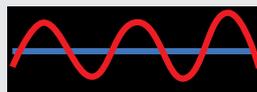
SPIKES a sudden and very large increase in the voltage level. Quite dangerous for the load



SURGES a sudden increase in the voltage level above the normal level, usually more than 20ms



NOISE voltage disturbances generated by magnetic field interference (EMI) or by radio frequency interference (RFI)



OVER VOLTAGE an increase of input voltage for a long period of time. The load is still supplied with a voltage above its tolerances. A dangerous condition for the load.



HARMONICS a distortion of the voltage waveform



FREQUENCY FLUCTUATION a frequency variation



NEMO 2.0

Single-Phase Line Interactive UPS

NEMO 2.0 series by ELSIST is available in seven output power levels and provide a transfer time extremely short (4ms).

All the models (from 650VA to 4000VA) are equipped with a LCD display for monitoring:

1. Input Voltage
2. Output Voltage
3. Operating mode with input mains
4. Operating mode with battery
5. Battery Level
6. Low Battery
7. Load Level
8. Overload
9. Errors and malfunctions



NEMO 2.0 series is equipped with an automatic voltage regulation against line voltage deviations (AVR), and with overload and shortcircuit protections on the output.

All models include an integrated RJ11/RJ45 filtered connector for phone line.

A USB interface is also included in the models.

By means of the embedded shutdown software, the unit allows you to control and monitor the most important operations of the UPS.

NEMO 2.0 series meets all the requirements requested by international standards about Safety and EMC compatibility.

Provide your printers, workstations, PCs, and other IT applications with reliable protection against data loss using NEMO 2.0 series of uninterruptible power supply.

Code		NEMO 2.0 65	NEMO 2.0 80	NEMO 2.0 120	NEMO 2.0 160	NEMO 2.0 200	NEMO 2.0 300	NEMO 2.0 400
Technical Requirements								
Power rating	VA	650	800	1200	1600	2000	3000	4000
Input Voltage		230 Vac \pm 27%						
Input Frequency		50/60 Hz \pm 10%						
Output Voltage		230 Vac \pm 10% (\pm 5% without mains)						
Output Frequency		50/60 Hz \pm 1%						
Autonomy Time		10'						
Battery Type		Pb sealed, maintenance-free						
Output Outlets		2 IEC	2 IEC	4 IEC	2 IEC, 2 SCHUKO			
Modem/T port (10BaseT/100BaseT)		RJ11 (2 wires, single line) or RJ45 (network compatibility)						
USB Interface		yes						
LCD Display		yes						
Weight and Dimensions								
Dimensions (WxHxD)	mm	101x298x142	101x298x142	101x298x142	149x353x162	158x380x198	158x380x198	145x436x213
Weight with battery	kg	3,9	4,4	4,7	8,4	10	10,50	23

Total power protection - Ultra-wide input voltage range operation for avoiding battery discharge

Monitoring of the UPS operations

Cold start capability

Low battery/exhausted battery controls

Capability to set different levels of alarms

USB interface for control and data acquisition via PC

Remote communication and control capability



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