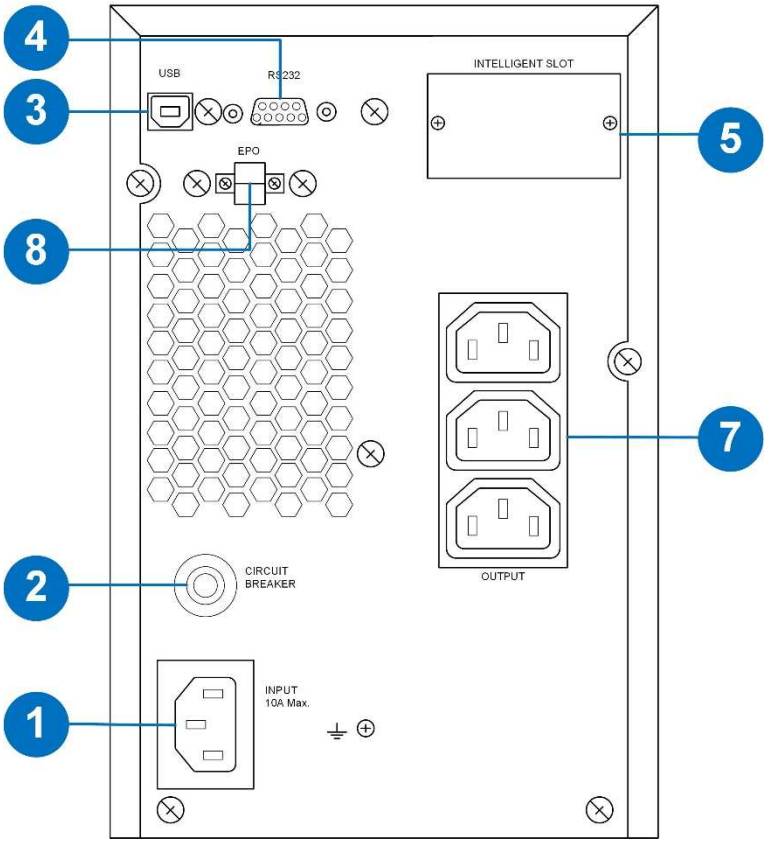
UPS COVER Basic 1K (EPO)

Quick Start Guide

Appearance and connection



COVER Basic 1K (EPO) power supply - rear view

1 Power socket.
2 UPS power circuit fuse.
3 USB communication port.
4 RS-232 communication port.
5 Communication port slot (SNMP).
7 Output outlets.
8 Remote Emergency power off (EPO) input.

EPO connector - emergency stop switch against fire

To the connector marked EPO connect the emergency switch against fire.

The standard configuration of the EPO is an NC (normally closed) type connector, i.e. for the correct operation of the UPS it is necessary to leave the jumper in the connector or connect a circuit breaker ensuring short circuit. Opening the EPO connector immediately disconnects the UPS output voltage and switches the UPS to Stand-By mode.

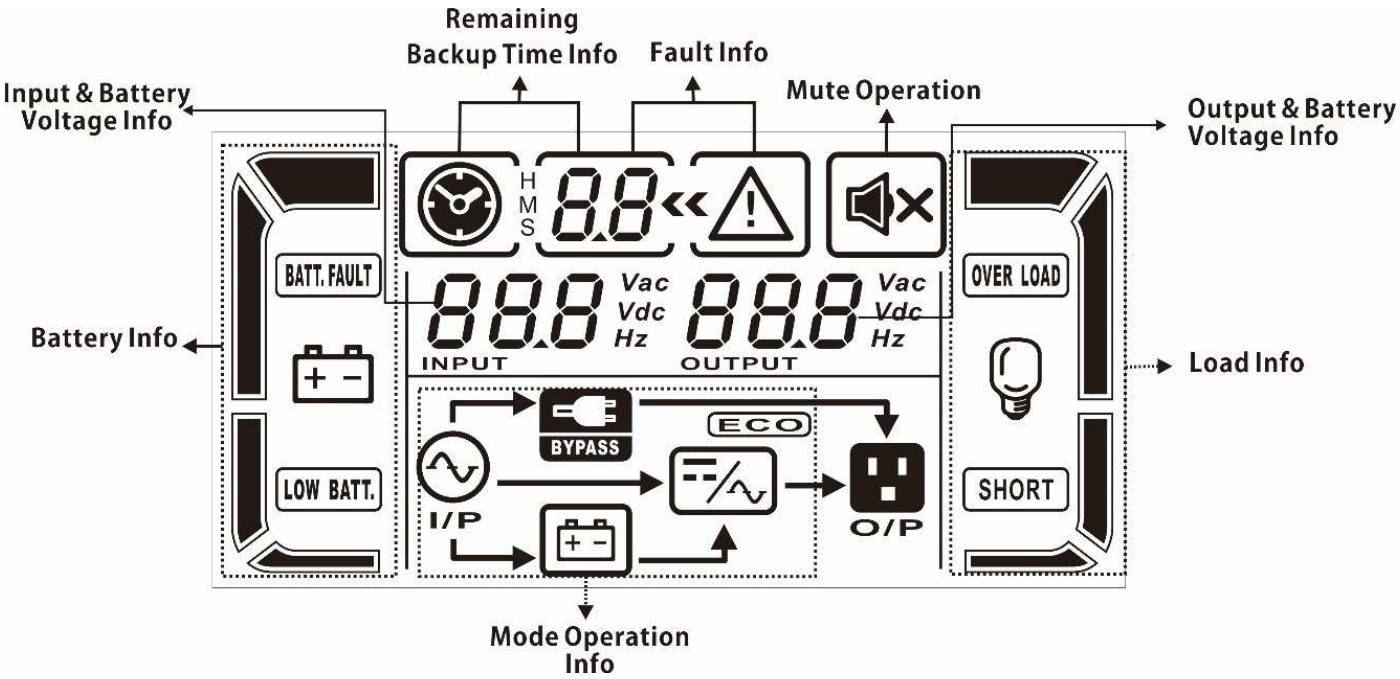
NOTE: If it is necessary to change the EPO configuration to NO (normally open) please contact an authorized service center or supplier.

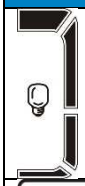
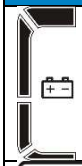
LCD display operation

Function keys

Button	Function
ON/MUTE	• Turn on the UPS: Press and hold for 2 seconds to turn on the UPS. • Alarm mute: When the UPS is on battery, press and hold for 3 seconds to silence or enable the buzzer. Alarm silencing is not possible in the event of an alarm condition. • Up Arrow: Key to scroll up to the previous line in the UPS setup menu. • Turning on the self test mode: Press and hold for 3 seconds in time normal operation of the UPS to activate the test.
OFF/ENTER	• UPS shutdown: Press and hold for 2 seconds to turn off the UPS or switch to Bypass mode (depending on the selected operation configuration options). • Confirm Selection: Press the key to confirm the selection in the UPS setup menu.
SELECT	• Switching between display information: Press to switch between information displayed on the panel such as voltage, frequency, battery voltage. • Setup menu: Press and hold for 5 seconds to enter the UPS setup (configuration) menu. This function is available only when the UPS is in Bypass or Stand-By mode. • Down arrow key: A key for scrolling down to the next line in the UPS setup menu.

LCD Panel



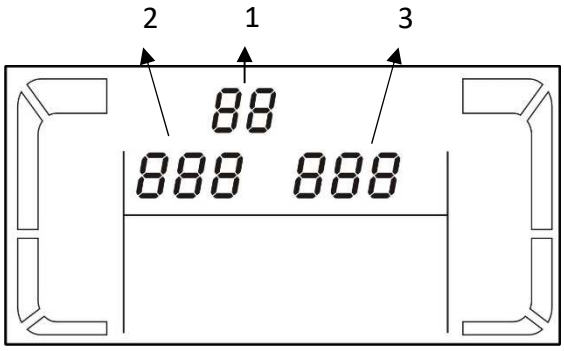
LCD Panel	Function
Information about the time of autonomy	
	Displays the estimated autonomy of the UPS H: hours, M: minutes, S: seconds
Configuration and error information	
	Displays the parameter value.
	Displays an error or warning code.
Output information	
	Displays the voltage or frequency parameters and the battery voltage. Vac: output voltage, Hz: output frequency, Vdc: battery voltage
Load information	
	Indicates load level 0-24%, 25-49%, 50-74% and 75-100%.
	Indicates an overload condition.
	Indicates a short circuit condition at the device output.
Information on programmable outputs	
	Indicates whether a programmable socket group is configured.
Information about the operating mode	
	Indicates that the UPS is connected to the 230V mains.
	Indicates the UPS is running on battery.
	Indicates the UPS is operating in Bypass mode.
	Indicates that the ECO mode is on.
	Indicates that the UPS inverter is running.
	Indicates that the output voltage is present.
	Indicates the sound on the UPS is muted.
Battery information	
	Indicates 0-24%, 25-49%, 50-74%, and 75-100% charge level.
	Indicates a defective battery condition.
	Indicates a low battery condition.
Information about power supply parameters and battery voltage	
	Displays input voltage, frequency, and battery voltage. Vac: 230V mains voltage, Vdc: battery voltage, Hz: mains frequency

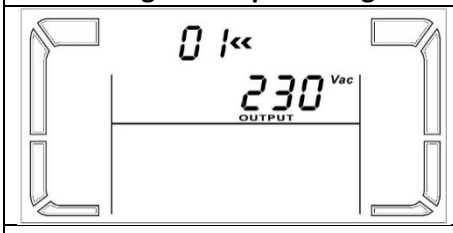
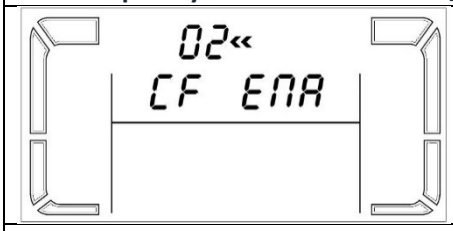
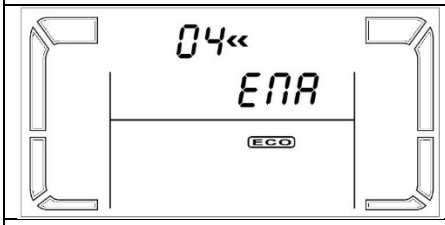
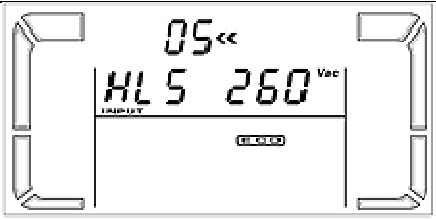
UPS settings menu

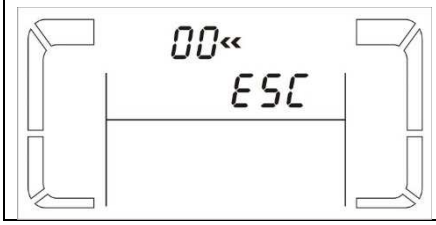
Use in the UPS configuration menu is possible when the UPS is turned off (Stand-by or Bypass mode).
To enter the configuration menu, press the SELECT key for 5 seconds.
View of the configuration menu and description of the possible settings below.

Parameter 1
Indicates the number assigned to a specific parameter as described below, e.g. 01 - output voltage.

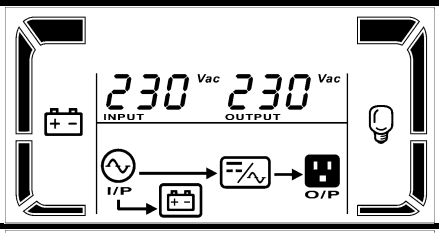
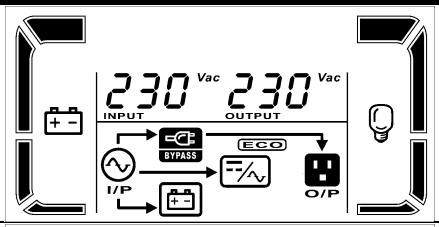
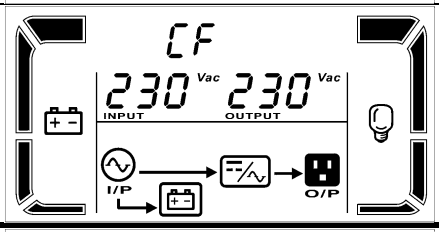
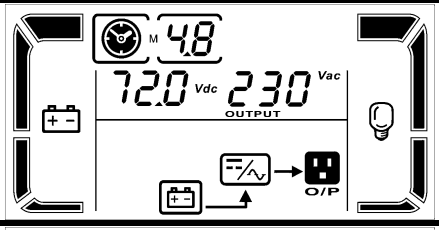
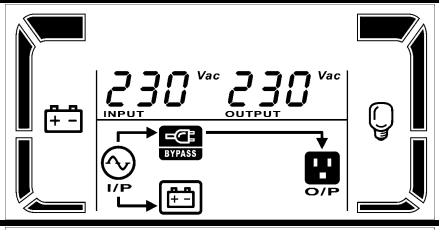
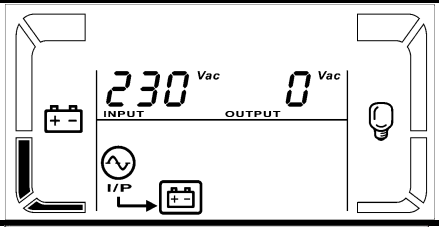
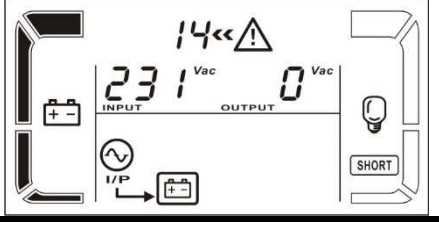
Parameter 2 and 3
Indicates a value specific for a given parameter, e.g. 230 - output voltage value.



Display state	Settings
01 - Setting the output voltage value	
	200: Indicates 200Vac output voltage 208: Indicates 208Vac output voltage 220: Indicates 220Vac output voltage 230: indicates 230Vac output voltage (default) 240: Indicates 240Vac output voltage
02 – Frequency converter available / not available	
	ENA: Converter function available DIS: Converter function unavailable (default)
03 - Frequency setting	
	Frequency setting for battery operation: BAT 50: 50Hz output frequency BAT 60: output frequency 60Hz If the frequency converter function is available, the frequency of the output voltage can be selected: CF 50: 50Hz output frequency CF 60: 60Hz output frequency
04 – ECO mode	
	Setting the availability of economy mode (ECO mode) ENA: ECO function available DIS: ECO function unavailable (default)
05 – Voltage tolerance range in ECO mode	
	Settings of the lower and upper tolerance of the supply voltage for the ECO / AECO mode. HLS: upper range of the supply voltage. Using the arrow keys it is possible to select the range + 7V ÷ + 24V from the nominal value, e.g. 230V (default + 12V). LLS: lower range of the supply voltage. Using the arrow keys it is possible to select the range 77V ÷ -24V from the nominal value, e.g. 230V (default -12V).

06 – Bypass availability while the inverter is turned off	
	Bypass availability setting when the UPS has the inverter turned off (UPS in Stand By mode). EAW: Bypass available DIS: Bypass unavailable (default)
07 – Voltage tolerance range for Bypass	
	Setting the lower and upper tolerance of the supply voltage for the Bypass. Exceeding the declared voltage thresholds results in the inaccessibility of the bypass path. HLS: Bypass high voltage threshold. Using the arrow keys it is possible to select the voltage of 230V ÷ 264V (default 264V). LLS: Bypass low threshold. Using the arrow keys it is possible to select the voltage 170V ÷ 220V (170V by default
08 - Battery autonomy limitation	
	Setting the maximum battery life 0 - 999 minutes. DIS: Restriction lock. Autonomy depending on battery capacity. (Default) Warning! Setting the value to "0" means an autonomy of 10 seconds.
00 – Exit the settings menu	
	Exits the UPS configuration menu.

Description of the UPS operation modes

Operating mode	Description	LCD state
Normal mode (On Line)	If the supply voltage is within tolerance, the UPS supplies the loads with clean and stable voltage with a sinusoidal shape. In this mode, the batteries are charged.	
ECO mode	Economy mode If the supply voltage is within tolerance, the supply voltage is supplied directly to the UPS output. The inverter is in Stand-by mode, which increases efficiency and reduces operating costs.	
Frequency converter mode	If the supply voltage frequency is within the range of 40 ÷ 70Hz, it is possible to set a fixed value of the output voltage frequency of 50 or 60Hz. This mode also charges the batteries.	
Battery operation mode	In the event of a power failure or when the supply voltage is out of tolerance, the UPS transfers to battery operation. A beep is made every 4 seconds.	
Bypass mode	If the mains voltage is within the acceptable tolerance limits, but an overload or any other event occurs, the UPS will switch to Bypass mode. A beep is made every 10 seconds. In this mode, the batteries are charged.	
Stand-by mode	UPS is turned off, no voltage is applied to the output. In this mode, the batteries are charged.	
Alarm	In emergency mode, the UPS shows the error code and the icons associated with the event.	

Error code

Error	Code	Icon	Error	Code	Icon
BUS start error	01	X	Short circuit on the inverter output	14	SHORT
High BUS voltage	02	X	High battery voltage	27	BATT. FAULT
BUS low voltage	03	X	Low battery voltage	28	BATT. FAULT
Inverter start error	11	X	High temperature	41	X
Inverter voltage high	12	X	Overload	43	OVER LOAD
Inverter voltage is low	13	X	Charger damaged	45	X

UPS warnings and audible alarms

Warning	Icon	Alarm
Low battery voltage	LOW BATT.	Beep every 2 seconds
Overload	OVER LOAD	Beeps every second
Batteries not connected		Beeps every 1 second
Overload		Beep every 2 seconds
Wiring / connection error	I/P	Beep every 2 seconds
EPO input active	EP	Beep every 2 seconds
Overheat	tP	Beep every 2 seconds
Charger damaged	CH	Beep every 2 seconds
Battery failure	BATT. FAULT	Beep every 2 seconds. (UPS off)
Bypass out of tolerance	BYPASS	Beep every 2 seconds
Bypass frequency unstable	FU	Beep every 2 seconds
Error EEPROM	EE	Beep every 2 seconds
Fan error	FA	Beep every 2 seconds
Battery replacement necessary	bt	Beep every 2 seconds

UPS support

Turn on the UPS

To turn on the UPS, press and hold the ON / Mute button on the UPS display for 2 seconds.

Warning! In order to obtain the maximum duration of autonomy, the batteries should be charged at least 10 hours after the first use. The maximum capacity of the battery is obtained after two complete cycles: discharge / charge.

Turn off the UPS

To turn off the UPS, press the OFF / ENTER button on the UPS display for 2 seconds. Depending on the setting of parameter 6 - Bypass availability, the UPS will disconnect the output or switch to Electronic Bypass mode.
To completely shut down the UPS, disconnect the power cord.

Battery test

To activate the test function in the UPS, press and hold the ON / MUTE key for 3 seconds while the UPS is operating in normal, economic or converter mode. The UPS will run the test automatically and then go back to the previous working state.

Mute the audible alarm

The UPS emits beeps while the UPS is operating on battery. To silence the UPS, press and hold the ON / MUTE key for 3 seconds.

Installing the software

To take full advantage of the UPS's capabilities, please install the supplied ViewPower communication software. During the installation, follow the instructions on the computer screen. You must restart your computer after the installation process is complete. Restarting the computer will automatically launch ViewPower, as shown by the ViewPower icon in the Windows system tray.

Alarm signals

Battery mode	Beeps every 5 seconds.
Low battery voltage	Beeps every 2 seconds.
Overload	Beeps every 1 second.
Error	Continuous tone.

LCD display letter abbreviations

Shortcut	Display indication	Meaning
ENA	ENA	Enabled
DIS	dIS	Disabled)
ESC	ESC	Escape
HLS	HLS	Voltage too high (High loss)
LLS	LLS	Voltage too low (Low loss)
BAT	bAt	Battery
CHA	CHA	Charger current
CBV	Cbu	Boost voltage
CFV	CFu	Float voltage
CF	CF	Converter
ON	On	Turn on
TP	tP	Temperature
CH	CH	Charger
FU	FU	Bypass frequency unstable
EE	EE	Error EEPROM
FA	FA	Fan error
BR	bt	Battery replacement