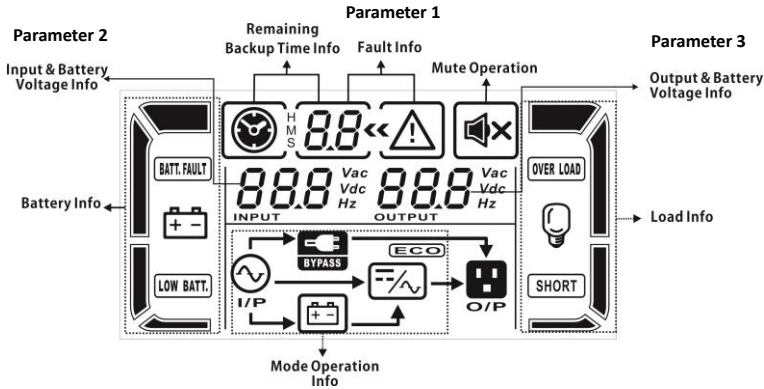


PowerWalker VFI 1000-3000 C LCD

Quick Guide

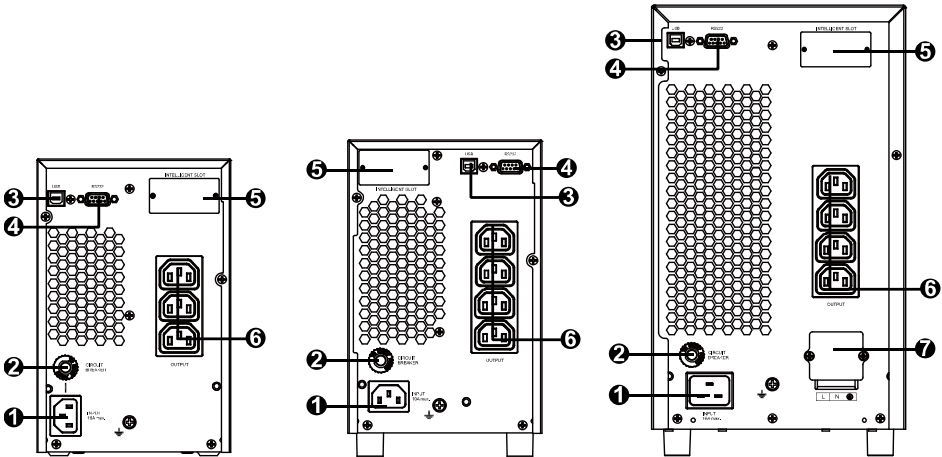
I. LCD Panel



Display	Function
	Indicates the remaining backup time in pie chart.
H M S 88	Indicates the remaining backup time in numbers. H: hours, M: minute, S: second
Warning icon	Indicates that the warning and fault occurs.
88	Indicates the warning and fault codes, and the codes are listed in details in 3-5 section.
Speaker with X icon	Indicates that the UPS alarm is disabled.
888 Vac Vdc Hz OUTPUT	Indicates the output voltage, frequency or battery voltage. Vac: output voltage, Vdc: battery voltage, Hz: frequency
Light bulb icon	Indicates the load level by 0-25%, 26-50%, 51-75%, and 76-100%.
OVER LOAD	Indicates overload.
SHORT	Indicates the load or the UPS output is short circuit.
Wavy line icon	Indicates the UPS connects to the mains.
I/P	Indicates the battery is working.
BATTERY icon	Indicates the battery is working.
BYPASS	Indicates the bypass circuit is working.

	Indicates the ECO mode is enabled.
	Indicates the Inverter circuit is working.
	Indicates the output is working.
	Indicates the Battery level by 0-25%, 26-50%, 51-75%, and 76-100%.
	Indicates the battery is fault.
	Indicates low battery level and low battery voltage.
	Indicates the input voltage or frequency or battery voltage. Vac: Input voltage, Vdc: battery voltage, Hz: input frequency

II. Rear panel view



- 1.AC input
- 2.Input circuit breaker
- 3.USB communication port
- 4.RS-232 communication port

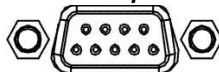
- 5.SNMP intelligent slot (option)
- 6.Output receptacles
- 7.Output terminal (only 3kVA unit)

III. Communication connection

USB port



RS-232 port



Intelligent slot

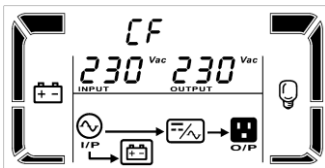


Apart from standard USB Port, the UPS is equipped with RS-232. Those two ports do not work at the same time.

IV. Modes and warnings

Warning	Icon	Alarm	Muted
Online mode		No Alarm	N/A
ECO mode		No Alarm	N/A
Frequency Converter mode		No Alarm	N/A
Battery mode		Sounding every 4 seconds	Yes
Bypass mode		Sounding every 10 seconds	Yes
Standby mode		No Alarm	N/A
Low Battery		Sounding every second	Yes
Overload		Sounding twice every second	No
Battery is not connected		Sounding every second	No
Over Charge		Sounding every second	No
Over temperature		Sounding every second	No
Charger failure		Sounding every second	No
Battery fault		Sounding every second	No
Out of bypass voltage range		Sounding every second	No
Bypass frequency unstable		Sounding every second	No
EEPROM error		Sounding every second	No
Fault		Continuously sounding	Yes

V. Frequency Converter Mode



When input frequency is within 40 Hz to 70 Hz, the UPS can be set at a constant output frequency, 50 Hz or 60 Hz. The UPS will still charge battery under this mode. Frequency Converter requires de-rating of the UPS Power to 80%.

VI. Button operation

ON/Mute Button

- Press and hold ON/Mute button for at least 2 seconds to turn on the UPS.
- When the UPS is on battery mode, press and hold this button for at least 5 seconds to

disable or enable the alarm system. But it's not applied to the situations when warnings or errors occur.

- Press this button to display previous selection in UPS setting mode (up key)
- Press and hold ON/Mute button for 5 seconds to enter UPS self-testing while in AC mode, ECO mode, or converter mode.

OFF/Enter Button

- Press and hold this button at least 2 seconds to turn off the UPS. UPS will be in standby mode under power normal or transfer to Bypass mode if the Bypass enable setting by pressing this button.
- Press this button to confirm selection in UPS setting mode.

Select Button

- Press this button to change the LCD message for input voltage, input frequency, battery voltage, output voltage and output frequency. It will return back to default display when pausing for 10 seconds.
- Press and hold this button for 5 seconds to enter UPS setting mode when UPS is in standby mode or bypass mode.
- Press this button to display next selection in UPS setting mode. (down key)

ON/Mute + Select Button

- When the main power is normal, press ON/Mute and Select buttons simultaneously for 5 seconds. Then UPS will enter to bypass mode. This action will be ineffective when the input voltage is out of acceptable range.

VII. UPS Setting

Parameter 1		Parameter 2		Parameter 3	
01	Output voltage setting			200/208/220 /230/240	Value in V AC
02	Frequency Converter Mode	CF	Converter Mode	ENA/diS	Enable or Disable (default)
03	Output frequency setting	CF	Converter Mode setting (if enabled)	50 / 60	Value in Hz
		BAT	Battery Mode setting	50 / 60	Value in Hz
04	ECO Mode			ENA/diS	Enable or Disable (default)
05	ECO voltage range setting	HLS	Upper Limit for Input Voltage	Nominal +7V to +24V	Value in V AC
		LLS	Bottom Limit for Input Voltage	Nominal -7V to -24V	Value in V AC
06	Bypass			ENA/diS	Enable or Disable (default) bypass mode
07	Bypass Input Voltage setting	HLS	Upper Limit for Input Voltage	230-264	Value in V AC
		LLS	Bottom Limit for Input Voltage	170-220	Value in V AC
08	Autonomy Limitation setting			0-999	Backup time limit in minutes. 0 actually means 10s and 999 means disabled
00	Exit setting				

VIII. Technical Specification

MODEL		1000	2000	3000
POWER		1000 VA / 800 W	2000 VA / 1600 W	3000 VA / 2400 W
INPUT				
Voltage Range	Low Transfer	Line	110-160VAC±5% Depending on the load level (gradually from 100% to 0%)	
	Low Comeback	Line	125-175VAC± 5 % Depending on the load level (gradually from 100% to 0%)	
	High Transfer	Line	300 VAC ± 5 %	
	High Comeback	Line	290 VAC ± 5 %	
Frequency Range		40Hz ~ 70 Hz		
Power Factor		> 0.99 @ nominal voltage (input voltage)		
OUTPUT				
Output voltage		200/208/220/230/240VAC		
AC Voltage Regulation		±1% (Batt. Mode)		
Frequency Range		47 ~ 53 Hz or 57 ~ 63 Hz (Synchronized Range)		
Frequency Range (Batt. Mode)		50 Hz ± 0.25 Hz or 60Hz ± 0.3 Hz		
Overload in battery mode		Ambient Temp.<35 ^o C 105%~110%: 10 min; 110%~130%: 1min; >130%:3s UPS transfers immediately to bypass when the utility is normal		
Current Crest Ratio		3:1		
Harmonic Distortion		< 3 % THD (linear load); < 6 % THD (non-linear load)		
Transfer Time	AC Mode to Batt. Mode	Zero		
	Inverter to Bypass	4 ms (Typical)		
Waveform (Batt. Mode)		Pure Sinewave		
EFFICIENCY				
AC Mode		88%	89%	90%
Battery Mode		83%	87%	88%
BATTERY				
Battery Type		12 V / 9 AH	12 V / 9 AH	12 V / 9 AH
Numbers		2	4	6
Recharge Time		4 hours recover to 90% Power (Typical)		
Charging Current		1.0 A (max.)		
Charging Voltage		27.4 VDC ± 1%	54.7 VDC ±1%	82.1 VDC ±1%
PHYSICAL				
Dimension, D x W x H (mm)		282 X 145 X 220	397 X 145 X 220	421 X 190 X 318
Net Weight (kgs)		9.8	17	27.6
ENVIRONMENT				
Operation Humidity		20-90 % RH @ 0- 35 degC (non-condensing)		
Noise Level		Less than 50dBa @ 1 Meter		
MANAGEMENT				
Smart RS-232 or USB		PowerWalker ViewPower		
Optional SNMP		Power management from SNMP manager and web browser		