



VGS-ReadMe Type C Hybrid Cable



Bayview Technology VGS-ReadMe Type C Hybrid Cable User Manual

[Home](#) » [Bayview Technology](#) » Bayview Technology VGS-ReadMe Type C Hybrid Cable User Manual 

Contents

- [1 Bayview Technology VGS-ReadMe Type C Hybrid Cable](#)
- [2 Product Usage Instructions](#)
- [3 EMC Statement](#)
- [4 IMPORTANT SAFETY INSTRUCTION](#)
- [5 Introduction](#)
- [6 Installation](#)
- [7 EPO port](#)
- [8 UPS Monitoring Connection](#)
- [9 Maintenance](#)
- [10 APP-A. Troubleshooting](#)
- [11 APP-B Technical Specifications](#)
- [12 FAQs](#)
- [13 Documents / Resources](#)
 - [13.1 References](#)
- [14 Related Posts](#)



Bayview Technology VGS-ReadMe Type C Hybrid Cable



Specifications

- **Model:** On-Line 1000VA-3000VA
- **Compliance:** CE regulation, EMC Directive 2014/30/EU, LVD Directive 2014/35/EU, FCC Part 15
- **Safety Standards:** EN 62040 – 1
- **EMC Standards:** EN 62040 – 2

Product Usage Instructions

Important Safety Instructions

- **WARNING:**

Save these instructions! The manual contains important UPS and battery installation and maintenance instructions. Follow these instructions at all times.

- **WARNING:**

It is recommended to install the UPS in an ANSI/NFPA75 room with temperature precautions. Keep unauthorized personnel away from batteries.

- **DANGER:**

There are hazardous electric components inside this unit, such as heat-sinks.

Installation

1. Ensure the UPS is placed in a well-ventilated area.
2. Connect the UPS to a power outlet on a separate circuit.
3. Follow the provided instructions for proper installation to avoid interference with radio or television reception.

Maintenance

Regular maintenance of the UPS is essential for optimal performance:

- Check the battery status periodically.
- Clean the UPS exterior with a soft, dry cloth to prevent dust build-up.
- Refer to the user manual for specific maintenance tasks.

Replacement

If any components of the UPS need replacement:

1. Power off the UPS and disconnect it from the power source.
2. Contact a technician or authorized dealer for replacement parts.
3. Follow safety guidelines during the replacement process.

External Battery Pack

If using an external battery pack with your UPS:

1. Ensure compatibility with the UPS model.
2. Connect the external battery pack following the provided instructions.
3. Monitor the battery status regularly for optimal performance.

EMC Statement

These products are tested and thereby comply with the conditions of CE regulation, which are established to offer sufficient protection against dangerous interference for installation. Installation and use of the equipment should comply with the instructions provided to avoid such interference due to the amount of radio frequency energy that is generated by the equipment. Despite this, we cannot assure that a certain amount of interference may not occur in some installations.

If, by turning on and off, you conclude that the equipment's harmful interference influences your radio or television reception, use one of the following preventive measures:

- Place the receiving antenna in a separate location or orientation
- Ensure a greater distance between the receiver and the equipment
- Ensure that your Equipment connects to an outlet on a separate circuit
- Contact a technician experienced with radio and TV or the dealer for technical assistance

Declaration of Conformity Request

Units labeled with a CE mark comply with the following standards and directives:

- EMC Directive 2014/30/EU
- LVD Directive 2014/35/EU
- Safety: EN 62040 – 1
- EMC: EN 62040 – 2

The EC Declaration of Conformity is available upon request for production with a CE mark.

FCC Part 15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1. This device may not cause harmful interference, and 2. this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT SAFETY INSTRUCTION

- **WARNING:** SAVE THESE INSTRUCTIONS!!
- **WARNING:** The Manual contains important instructions for UPS and batteries during installation and maintenance. Follow this instruction at all times.
- **WARNING:** It is recommended to install the UPS in an ANSI/NFPA75 room in which temperature and humidity are controlled and free from electrically conductive particles. DO NOT expose UPS to direct sunlight or high heat sources; DO NOT block off the ventilation opening around the housing.
- **CAUTION:** Before conducting maintenance, repair, or shipment, please turn off everything completely and disconnect them.
- **CAUTION:** The UPS is NOT applicable for any inductive loads such as motors or domestic appliances like hairdryers, speakers, and fluorescent lamps.
- **CAUTION:** All interconnection and power cables should be connected ONLY AFTER the UPS shuts down and is disconnected from the main.
- **CAUTION:** Only use No.26 AWG or larger certified cables to connect the UPS and the device
- **CAUTION:** DO NOT unplug UPS from main power during operation, or protective ground will fail. DO NOT disconnect the battery under load, or a shut down may occur.

- **CAUTION:** Ensure the total leakage current of the UPS and the connected equipment is under 3.5 mA.
- **CAUTION:** Ensure that the UPS connects to grounded main power with a fuse or circuit breaker protection.
- **CAUTION:** A Dangerous amount of voltage might still exist even when the UPS disconnects from the main power since residual voltage exists due to the battery supply.
- **CAUTION:** Beware of all the details on the cautionary sticker located on UPS.
- **CAUTION** (No user-serviceable parts): Do not attempt to remove the unit's cover; no user-serviceable parts are inside. Please refer all service to qualified service technicians.
- **CAUTION:** DO NOT dispose of UPS and its batteries to fire; the battery may explode
- **CAUTION:** DO NOT attempt to open or mutilate the battery.
- **User's operations:** Users are only permitted to:
 - Turning the UPS unit on and off.
 - Operating the user interface.
 - Connecting data interface cables.
 - Changing the batteries (Except 3k Tower model)
- **CAUTION:**

Batteries can cause shock and short circuit current. When servicing batteries:

 - A. Remove watches, rings, or other metal objects.
 - B. Use tools with insulated handles.
 - C. Wear rubber gloves and boots.
 - D. Please DO NOT place any tools or metal parts on top of batteries.
 - E. Disconnect charging source before connecting/disconnecting battery terminals
 - F. Servicing of batteries should be performed or supervised by personnel with the necessary precautions and knowledge. Keep unauthorized personnel away from batteries.
- **DANGER:** Hazardous electric components are inside this unit, g., Heat sinks. Remain energized from the battery supply even when the main power is disconnected.
- **DANGER:** The Battery circuit is not isolated from the AC input. Hazardous voltage may exist at battery terminals and ground—test for safety before any direct contact.
- **CAUTION:** Remove the battery's pole during service inside the battery cabinet or UPS.
- **CAUTION:** ONLY replace batteries with the same type and quantity
- **WARNING** (Fuses): Ensure fuse replacement with the same type and rating ONLY.


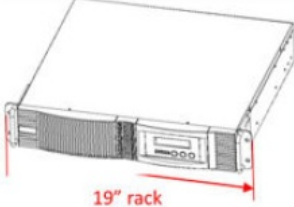
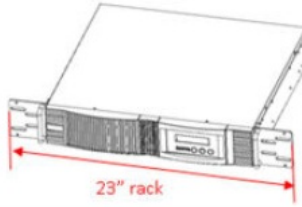



Introduction

The information provided in this manual covers the On-Line 1000-3000VA uninterruptible power system (UPS). This manual contains basic functions, operating procedures, and emergency procedures, as well as information on how to ship, store, handle, and install the equipment. Only detailed requirements of the UPS units described herein. The installation must be carried out according to this manual. The electrical installation must further comply with local legislation and regulations.

Installation

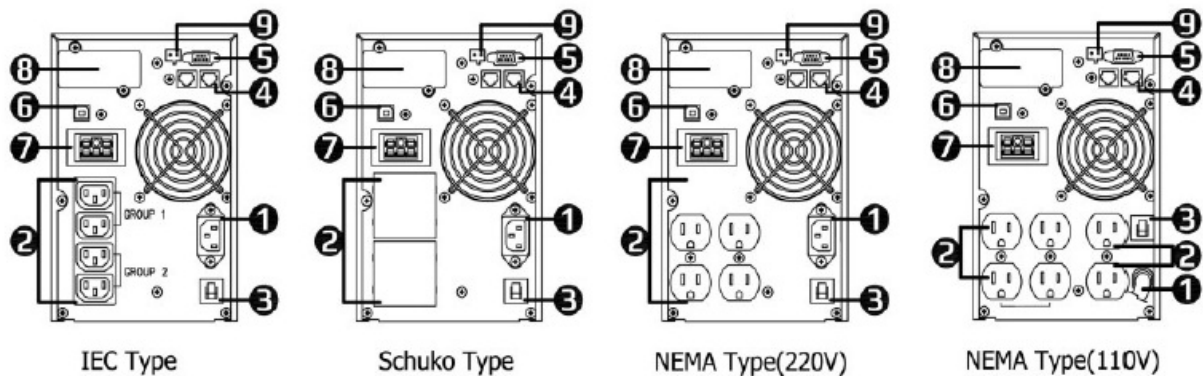
Hardware Installation

Please install the vertical and wall-mounted types of units according to the following.

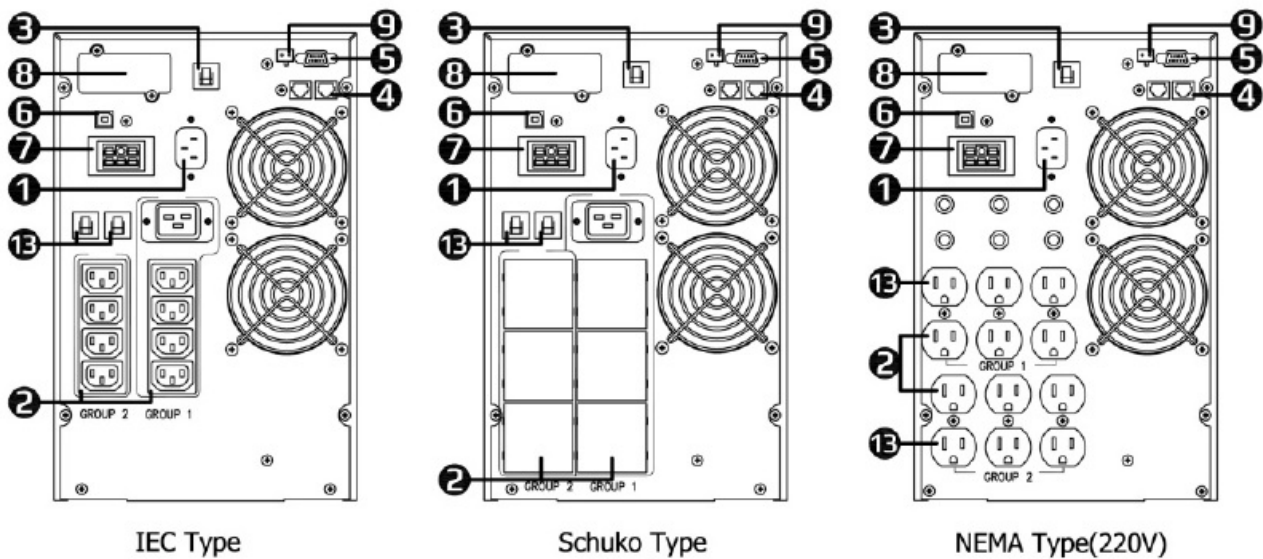
5 in 1 RACK-MOUNT BRACKETS: 94A-VM1K-000*4, 641-5008-410*16	19" Rack Parts EIA 310C Stander Rack	23" Rack Parts EIA 310 Stander Rack
		
Tower Mount the bracket with screw and stand as fig below	Wall mount Mount the bracelet at the side with screw and place as fig below	Rear bracket Mount the bracket at the rear of UPS or battery
		

Rear panel view

VGS 1-1.5KVA

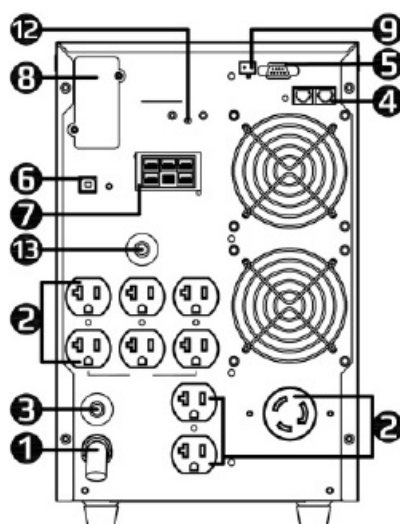


VGS 2-3KVA

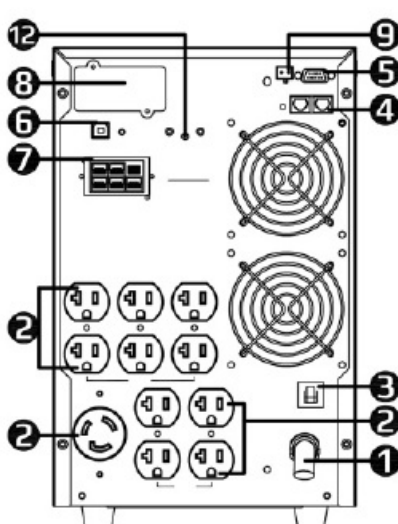


VGS 2-3KVA(110V)

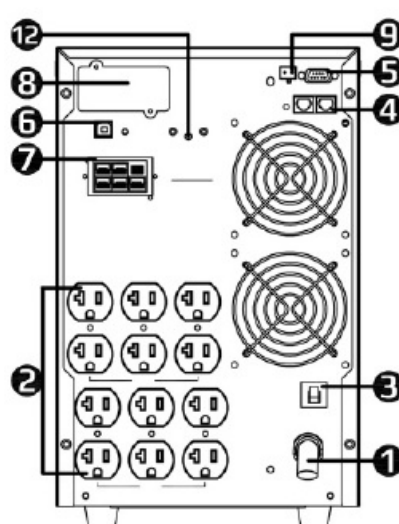
1. Input
2. Outlet
3. Input breaker
4. Network transient protector
5. RS232 port
6. USB (optional)
7. External battery port (optional)
8. Interface port (optional)
9. EPO (optional)
10. Maintenance switch (optional)
11. Terminal block
12. Reset
13. Outlet breaker



NEMA Type(110V)
8*5-20R+1*L5-30R

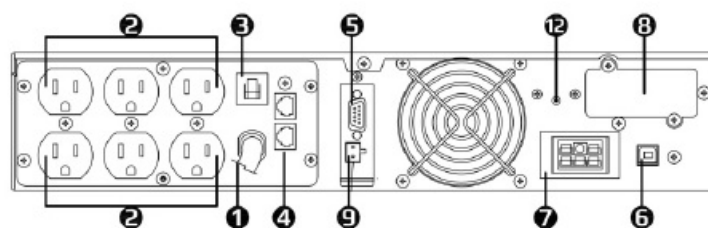


NEMA Type(110V)
10*5-20R+1*L5-20R

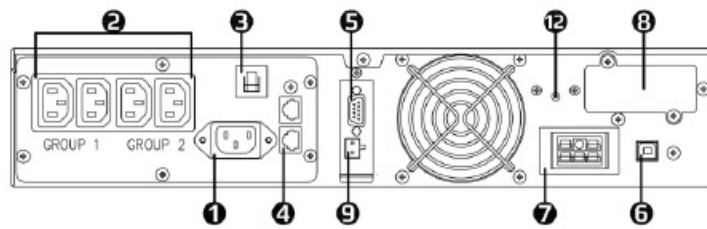


NEMA Type(110V)
12*5-20R

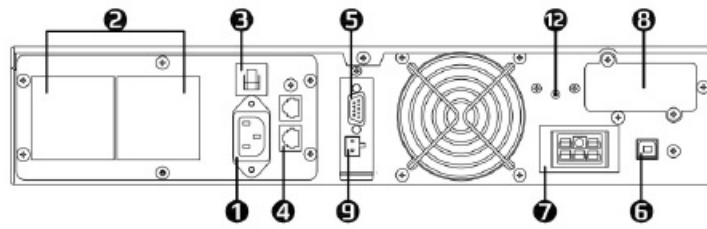
VRT 1K-1.5KVA



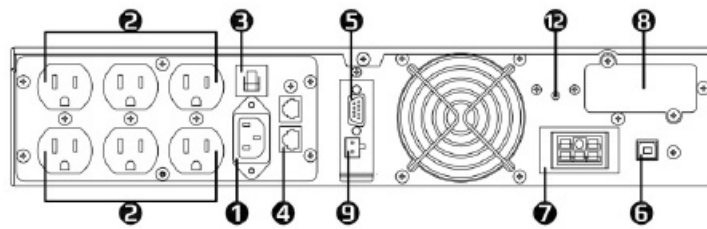
NEMA Type (110V)



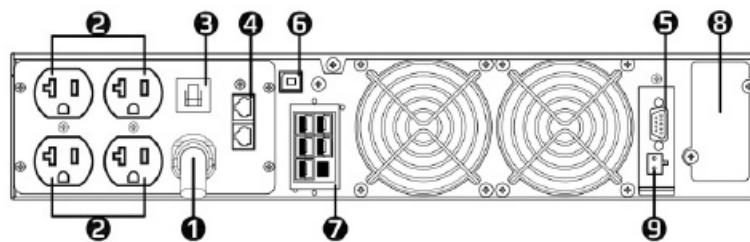
IEC Type



Schuko Type

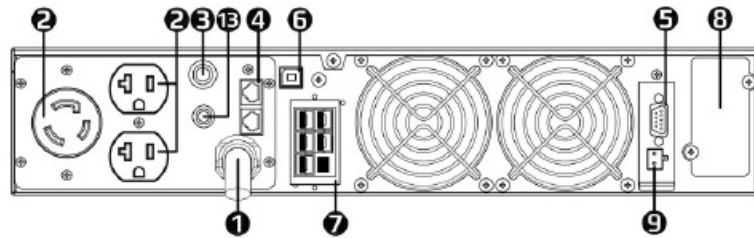


VRT 2K-3KVA(110V)

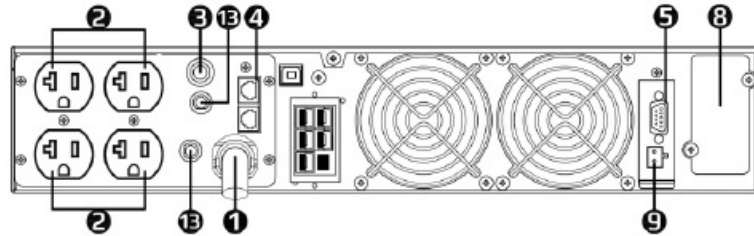


NEMA Type(110V)
4*5-20R

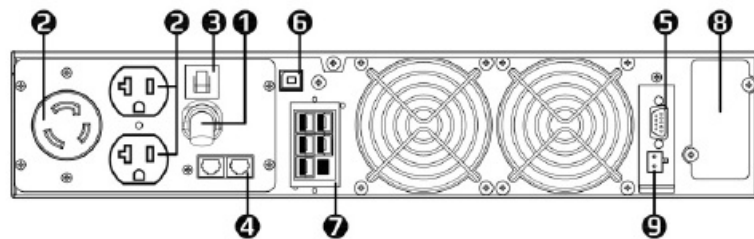
VRT(2U) 2K-3KVA(110V)



NEMA Type(110V)
2*5-20R+1*L5-30R



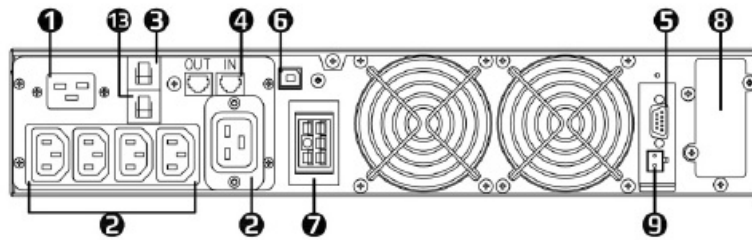
NEMA Type(110V)
4*5-20R



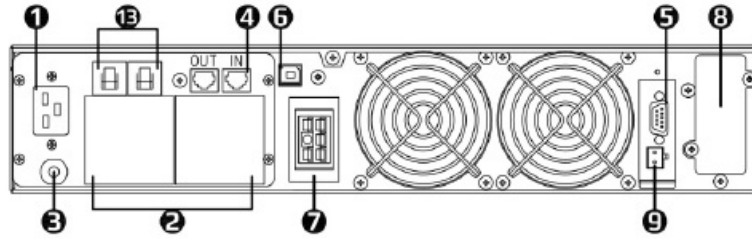
NEMA Type(110V)
2*5-20R+1*L5-20R

VRT(2U) 2K-3KVA

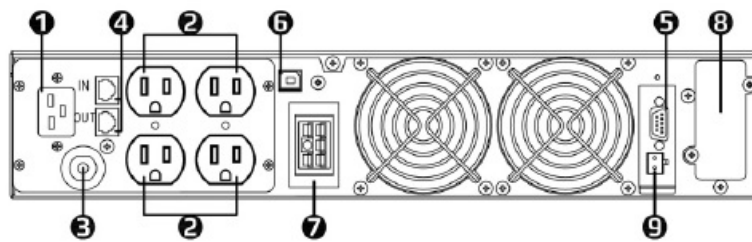
1. Input
2. Outlet
3. Input breaker
4. Network transient protector
5. RS232 port
6. USB (optional)
7. External battery port (optional)
8. Interface port (optional)
9. EPO (optional)
10. Maintenance switch (optional)
11. Terminal block
12. Reset
13. Outlet breaker



IEC Type



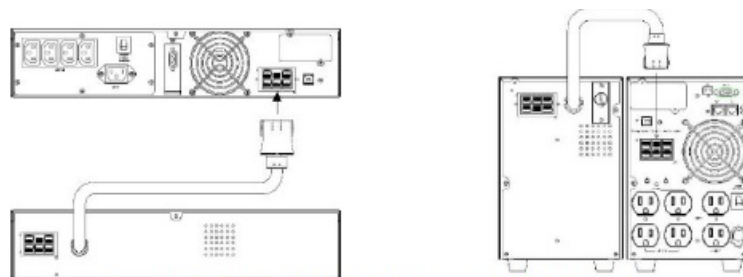
Schuko Type



NEMA Type

EPO port

A customer-supplied switch can remotely be used to open the EPO connection and Shut off the UPS output. Since EPO shuts down the UPS immediately without regular procedure and monitoring, the UPS will require a manual restart to restore operation.



● Fig. Example of connecting to an external battery pack

Connection to External Battery Pack

- External battery connections shall be installed by service personnel only.
- Please read the safety instructions first before proceeding.
- Ensure the UPS disconnects from all mains and loads before attempting.
- Locate the battery connector, then use only factory-supplied or authorized battery cable provided to connect the UPS with the battery as in the figure below.
- Connect the second battery to the first one if more than one is needed
- The Maximum quantity of battery pack is regulated to 2 by UL approval.

Connection to Main and Load

- Follow all installation and safety instructions very carefully; failure to do so may cause hazardous situations to personnel and equipment.
- Ensure the main power voltage matches the UPS. (110V/220V)
- For electrical installation, closely observe the nominal current rating of the source.
- Check the equipment's power requirement to prevent overloading situations.
- Do not connect devices that draw either massive power shortly or half-wave rectified current – such as hairdryer, vacuum cleaner, laser printer, and plotter. Note: Although you may use the UPS immediately, maximum backuptime will not be available yet. It is recommended to charge the batteries for a minimum of 8 hours before use
- Connect the input cable to the UPS and the other end to the mains. The battery will automatically charge when connected to the main power.
- After charging the UPS, connect the load to the UPS
- Should computer or alarm connections be used, refer to the UPS monitoring connection chapter for further detail.
- The installation is completed.

Note:

(For Schuko) If the unit instantly shows “set wiring fault,” please rotate the connector. See troubleshooting for details. (Optional) To protect your telecom/internet system, use an RJ45/RJ11 cable to install the input/output cable with a matching in/out jack.

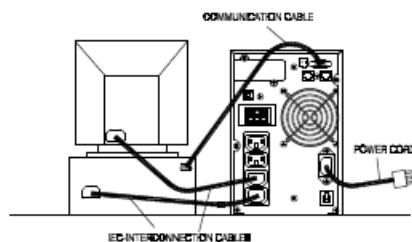


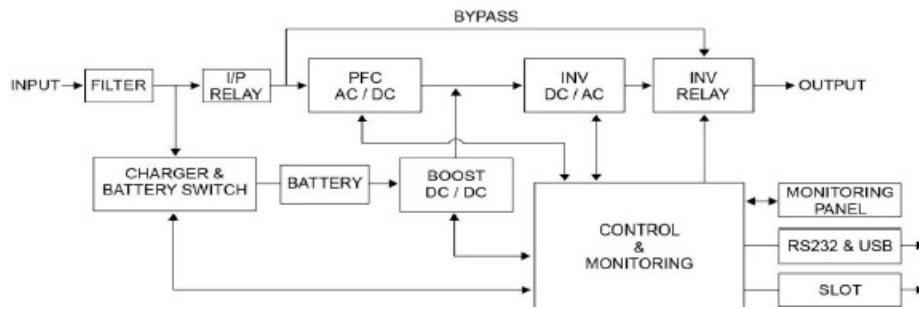
Fig. 3 Example of Installation of Plug & Play products

- Necessary information for the operation of the unit is covered in this chapter. Normally, UPS runs automatically, but on a few occasions, such as just after installation, all procedures are described herein.

General Description

As a double conversion online UPS, it can convert clean single-phase power to support your critical system. The diagram of the UPS is shown above.

- The input filter reduces transients and interference from the main
- With PFC AC/DC, AC power is rectified and regulated to DC power
- DC power is converted to AC in the inverter, passing it on to the load



• Line-Mode/Battery-Mode

UPS will operate in Line-Mode that supports power and charge battery while connected to power. During a power failure, the UPS will switch to Battery-Mode, in which power is maintained from the battery. In case the failure time exceeds the battery mode's duration, the UPS will shut down until the voltage returns to prevent battery discharge.

• Free Run Mode

Free Run Mode provides a wider input frequency range when the input frequency does not match the selected range (user adjustable). Free Run Mode enlarges input frequency acceptance up to 45Hz ~ 65Hz but fixes output frequency to 50Hz(220V) and 60Hz(110V) with $\pm 0.25\text{Hz}$. Free Run Mode designs for large power variation. It is activated by default and can run in line mode simultaneously.

• High-Efficiency Mode

High-Efficiency Mode is designed to minimize power loss and power consumption. Whenever power is stable, the UPS will automatically switch to bypass for efficiency. When any irregularity is detected, Line-Mode will reactivate immediately. Switching occurs when the input voltage is outside $\pm 10\%$ of nominal ($\pm 15\%$ selectable), the input frequency is outside of $\pm 3\text{Hz}$, or when no input line is available. You can also activate this mode from the LCD panel. Refer to the UPS configuration.

• Diagnostic Test

The diagnostic test automatically executes to check and report the UPS status. While the advanced battery management system monitors the conditions of the batteries, it sends early warnings if a battery replacement is needed. The test is performed every 30 days of normal mode operation. Diagnostic tests can also be performed by manual control.

• Generator mode

This mode is designed for highly unstable power. In this mode, UPS's normal operation will not transfer to bypass to prevent load damage and frequent battery discharge. UPS will also fix output frequency to 50Hz(220V) or 60Hz(110V) with $\pm 0.25\text{Hz}$. Users can set the UPS to bypass/shutdown whenever a UPS malfunction occurs. Generator Mode can be activated from the LCD panel, too.

System Configuration

The UPS device and battery make up the system. Depending on site and load requirements, certain additional options are available as tailored solutions. Please consider the following when planning your UPS system:

- The total demand for the protected system shall dictate the output power rating (VA). When measuring demand, please allow a margin for future expansion and calculation error.
- Battery-mode duration needs dictate the battery size. If the load is less than the UPS nominal power rating, then the actual backup time is longer.
- The following options are available:
- Connectivity options (relay card, SNMP/WEB card)

- External battery packs
- Transformer cabinets
- Maintenance bypass switches

Panel overview

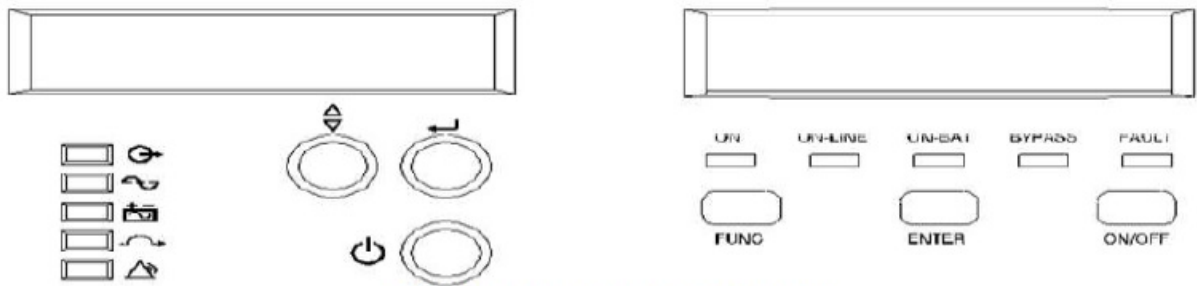


Fig. Control panel and display

UPS Control

Display	Function Description	Display	Function Description
LED Display			
	<u>UPS ON (Green)</u> The LED will display in green when UPS is on.		<u>On-Bat(Yellow)</u> UPS is operating with battery power LED will display in Yellow
	<u>On-Line(Green)</u> UPS In LINE/Static Bypass mode, a green light indicates output voltage exists		<u>Bypass (Yellow)</u> Bypass mode operating. LED will display in yellow
	<u>Fault:(Red)</u> Internal Fault Occur, LED will flash in red with an audible alarm		
LCD Display			
Line Mode	UPS is operating with Main power	Battery Mode	UPS is operating with battery power,
Bypass Mode	UPS on Bypass mode	Fault	UPS Fault Information. Refer to troubleshooting for detail
Button Display			
	<u>ON/OFF Button</u> To turn UPS on and off, refer to Button Operation		<u>Status / Enter Button</u> To check UPS status and confirm settings, refer to Button Operation
	<u>Function Button</u> To check UPS status and confirm settings, refer to Button Operation		

Control panel functions

Button operation



Cold Start function

When the main power is disconnected from the UPS, it is capable of starting with battery power for users' needs. Simply start the UPS as the instruction below.

Note:



To avoid accidental battery discharge, the cold start function is not available until the initial connection to the main power.

“ON/OFF” button

- (a) Press and hold the “” button for 3 seconds to turn on the UPS.
- (b) Press and hold the “” button for 3 seconds to turn off the UPS while the UPS is working







“Status/Enter” button

Use this button to check the content and confirm the selection of UPS.

- (a) Press and hold the “” button for 1 second to check the UPS contents.
- (b) Display each status by pressing once. There are 10 statuses available for users.
- (c) Enter function only used during settings. Check the “” button for more details.
- (d) If UPS idles for 20 seconds, the display will return to the main status.

“Settings or Selection” button

Use this button and the “ENTER” button to execute the setting

- (a) Press and hold the “” button for 1 second to enter the configurations of the UPS.
- (b) Display each setting by pressing the “” once. There are 7 settings available for users.
- (c) Press the “” button to enter the function.
- (d) Press the “” button to select your option.
- (e) Press the “” button to confirm (YES/NO) your selected option.
- (f) Press the “” button again to confirm and enable your function.
- (g) If UPS is idle for over 10 seconds, the display will return to the main status.

Turn on the UPS

- Ensure installation is correct and successful, and connect the input power cable to a well-grounded outlet.
- Push the “on/off” button on the front panel for 3 seconds.
- UPS should start its inspection of internal function, main synchronization, and inverter start-up. The LCD panel will display a “Line-Mode” indication, and power should start supplying via the outlet.
- Switch on the loads

Shut Down the UPS

- Shut down and turn off all the loads
- Press the “On/Off button f” button for 3 seconds. UPS will shut down with an alarm
- (If applicable) To avoid electrical hazards, please turn off the internal/external input breaker after the display disappears and only the backlight remains. Then, turn off any external battery breaker and wait till all fans

completely shut down.

- In an emergency, use the EPO located on the rear panel.

UPS Status Display







UPS status shows in normal display mode. From here, you can go to the UPS meter display by pressing the button. Various measurements are available through the UPS meters display. Pressing the button will scroll through the following meters.

LCD message	Description
O/P VOLT= xxx, xV	Shows Output AC voltage
O/P FREQ= xx, x Hz	Shows Output Frequency
I/P VOL T= xxx, xV	Shows Input AC voltage
I/P FREQ= xx, x Hz	Shows Input Frequency
BAT VOLT= xx, xV	Shows Battery Voltage
O/P LOAD%= xx%	Shows Load % of max load
O/P W= xW	Shows Output Watts
O/P VA= xVA	Shows Output VA
O/P CURR= xA	Shows Output Current
BACKUP TIME = xx min	Shows Estimated Backup time in minutes
BAT CHARG= xx%	Shows the approximate percentage of Battery capacity
TEMPERATURE= xxC	Shows approximate ambient temperature
BAT PACK NUM x	Shows External Battery Pack Number
RATING = xxxVA	Shows UPS Rating
CPU VERSION xx.x	Shows CPU Version

UPS Configuration

Caution:

Factory default settings do not necessarily have to be changed, although you are free to tailor the UPS to your specific needs. Here are the procedures to enter configuration mode

- Press and hold the “” button for 1 second to enter the configuration mode
- Display each setting by pressing the “” once. There are 7 settings available for user
- Press the “” button to enter the function.
- Press the “” button to select your options.
- Press the “” button to confirm (YES/NO) your selected option.
- Press the “” button again to confirm and enable your function.
- If UPS is idle for over 10 seconds, the display will return to the main menu.

Settings	LCD	Selection	Factory Default
Output Voltage Setting	O/P V Setting	[208V][220V][230V][240V]	[230V]
		[100V][110V][115V][120V][127V]	[120V]
Input/Frequency	I/P F Setting	[±2%] [±5%] [±7%]	[±5%]
Input/Bypass Voltage	I/P Bypass Set	[±10%][+10/-15%][+15/-20%]	[+10/-15%]
Free Run Mode	Free Run Set	[On][Off]	[On]
Bypass Enable/Disable at Free Run Mode	Bypass disable	[Enable] [Disable]	[Disable]
He Mode Setting	HE Mode Set	[On] [Off]	[Off]
Force Manual Bypass*	Manual bypass	[On] [Off]	[Off]
Management of load groups	Outlet Setting	[1&2 ON] [1OFF 2ON] [1&2 OFF] [1ON 2OFF]	[1&2 ON]
Do a Battery Test	Battery Test		
Silence Function	Silence Set	[On] [Off]	[Off]
Number of external battery packs	Bat Cabinet Set	[0] (Internal only) [1] (1 External cabinet) [2] (2 External cabinets)	[0]
Site wiring alarm	Sit Fault Set	[Enable] [Disable]	[Disable]
Select Language	Language	[English] [German] [French] [Spanish] [Italian]	[English]
Set Generator Mode	Generator	[On] [Off]	[Off]
Set RS232 communication	RS232 Control	[Enable] [Disable]	[Enable]

Note:

For UPS and power management software to operate normally, Manual Bypass should be set to “OFF,” or the load won’t be protected. This setting is specifically designed for maintenance personnel and should be used alone with an external maintenance switch if applicable.

UPS Manual test

Manual tests for the UPS or battery can be conducted from the UPS configuration as well and are functional even when the UPS is not charging the battery.

Simple test:

It's recommended to conduct a simple simulation test when

1. The first use of UPS.
2. Adding new loads.
3. 6 months' regular check-up

Switch on the UPS and wait for the power indicator to light up, then unplug the UPS to simulate the main power failure.

Manual Battery Test:

Scroll through the configuration until the Manual Battery test function is displayed. Then select by pressing "Enter" Twice

UPS Monitoring Connection

UPSMON Pro software (Or other power monitoring software) can further utilize the UPS with warning reminders, monitoring, controlling shutdown, and setting adjustments. Using monitoring features requires connecting the UPS to a computer or the internet

Connect UPS to Computer with USB (Optional)/RS232 port.

Locate the USB/RS232 port on the UPS.

- Connect with factory-provided/approved communication cable.
- Ensure your computer can install and support power management software.

Note:

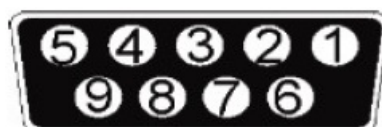
Either the USB Port or the RS232 port, only one port will function at a time.

Connect UPS with interface Slot(Optional)

- SNMP Card allows UPS management and monitoring over a network or internet
- For more information, please contact for technical assistance.
- AS400 Card allows voltage-free relay contacts

UPS RS232 PORT

- The RS-232 interface uses a 9-pin female D-sub connector.
- The RS-232 port carries the data about utility, load, and UPS.
- The interface port pins and their functions are in the following table.



Pin #	Signal	Direction	Function
2	TxD	Output	TxD Output
3	RxD	Input	RxD / Inverter Off Input
5	Common		Common
6		Output	AC Fail Output
8		Output	Low Battery Output
9		Output	12VDC Power

Load segments

The power management software controls the sets of receptacles known as load segments, which provide an organized shutdown and startup for the equipment. Less critical loads can be turned off during a power outage to save battery power for critical loads. Each segment can be viewed and changed by the LCD panel. You can also identify the Load segment at the rear panel. Read the Powermanagement manual for more detailed information.

Maintenance
Please read the following instructions to ensure your safety and maintain a longer product lifetime. This section contains detailed information about moving, maintaining, and placing the UPS. With a minimal amount of maintenance, you can expect the UPS to function smoothly.

Maintenance

Please read the following instructions to ensure your safety and maintain a longer product lifetime. This section contains detailed information about moving, maintaining, and placing the UPS. With a minimal amount of maintenance, you can expect the UPS to function smoothly.

Transportation

Please handle UPS with extreme caution since a high amount of energy is within the batteries. Keep the unit in position as marked on the pack, aging, and never drop the unit.

Storage

Please read the following instructions if the UPS is not installed immediately:

- Store the equipment as is in its original packing and shipping carton.
- Do not store in temperatures outside the range of +15°C to +25°C.
- Protect the equipment from wet areas and moist air.

Please handle UPS with extreme caution since a high amount of energy is within the batteries. Keep the unit in position as marked on the packaging, and never drop the unit.

- To maintain the vitality of the batteries, please recharge the UPS for at least 8 hours every six months.

Operation

CAUTION:

Ensure that all environmental concerns and requirements are met according to safety instructions; otherwise, the safety of installation personnel cannot be guaranteed since the unit may malfunction.

- Please ensure that no flammable substances, such as gases or fumes, are present.

- Avoid extreme temperatures and humidity. Protect the equipment from moisture.
- Ensure there is enough space (300mm or above recommended) at the rear and side of the UPS for proper ventilation.
- Ensure that the front of the UPS remains clear for user operation.
- Only authorized agents or technicians may service the unit.
- Do not open the UPS cabinet. Components may contain hazardous or fatal voltage.
- Output receptacles may carry live voltage without connecting to the main power.
- Pay special attention to the UPS air inlet; do not let it be covered by dust.

Battery

Maintenance

The reliability of the battery is heavily related to the environmental issue. At the temperature of 25 degrees Celsius, A regular 6-12 months' checkup is advised.

Replacement

Caution:

Read the safety instructions before proceeding.

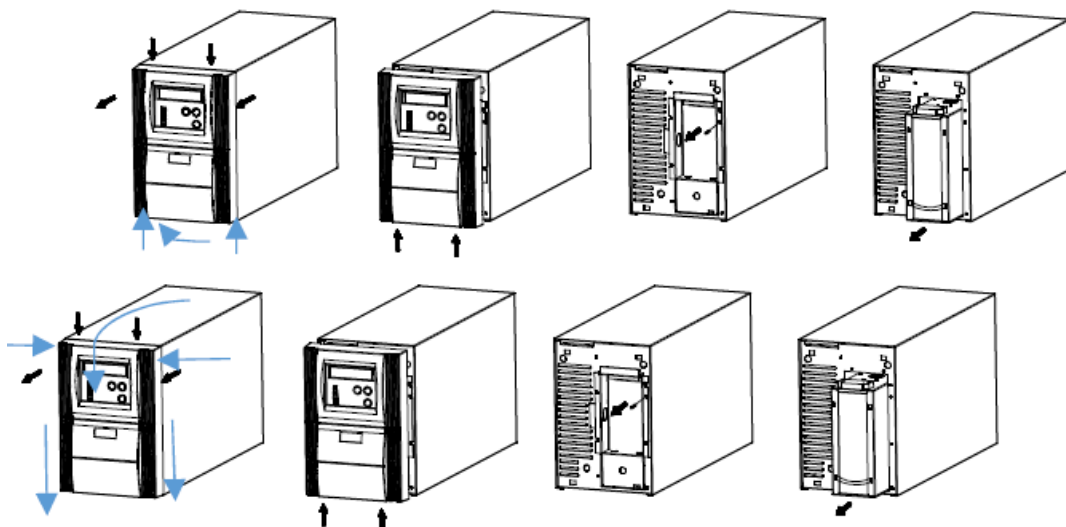
- In all the following steps and factory standards:
- The black battery cable is the negative (-) pole
- The red battery cable is the positive (+) pole

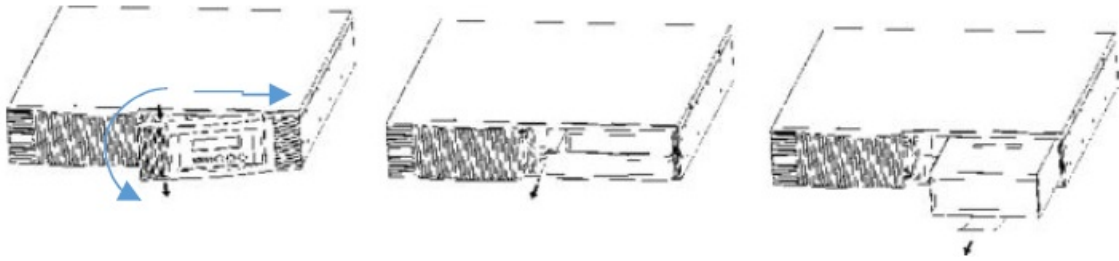
Caution:

Avoid the battery positive port's direct contact with metal. (including UPS cover)

Caution:

Do not remove the battery during battery mode





1. (For Tower model below 2KVA) Locate the front panel's 2 tenons as the arrow indicated; Press the tenon and pull out lightly. Then, push the front panel downward and pull it out to remove the panel. (For Tower model 2000VA)

Hold the top two corners of the front panel as the arrow indicates; Pull out lightly, then push down to unlock the bottom tenon. (For Rack model),

From the middle of the front panel, hold the display-side inner corner and pull out lightly. Then, push sideways to unlock the other tenon.

2. Remove the battery cover and cartridge.
3. Replace with the same type and quantity of battery
4. Reinstall the new battery cartridge back in the UPS

(For Tower Model) Ensure the battery terminal is connected to the matching terminal (Black to Black and Red to Red)

5. Reinstall the battery cover and front panel.

- **Note:**

Please ensure the battery connects correctly with the attached port.

- **Note:**

3KVA Tower model replacement is not available; Contact for technical assistance

- **Note:**

Do not forcefully pull out the front panel, the tenon may be damaged

- **Note:**

UPS's voltage will drop to 48Vdc when the battery is removed in all models.

External battery pack

The following chart is the recommended specification of the external battery pack/cabinet. For other options, please ensure that the option meets safety instructions and local legislation.

Note:

When powered by external batteries, output loads will be limited to 90% for overall power generation.

Model		1000VA	1500VA	2000VA	3000VA
Battery type		Lead-acid 12V/7AH			
Number of battery	Tower	6	8	12	16
	RM2U				12
Backup time/full load (battery pack only)		Approx. 13~15min	Approx. 13~15min	Approx. 13~15min	Approx. 10~13min
Recharge time		<8 h to 90%			
Dimensions W x D x H	Tower	152 x 420 x 237	152 x 500 x 238	225 x 420 x 358	
	RM2U	428 x 425 x 84	428 x 500 x 84	428 x 631 x 84	
Net Weight	Tower	18.8kg	22.9kg	34.6kg	43.2kg
	RM2U	20.7kg	26.4kg	37.3kg	37.3kg

Maintenance Bypass Procedure

Maintenance

1. Press the “ON/OFF” button to turn on the UPS. It will operate in “Line-Mode.”
2. Press the “Function” button for 3 seconds and toggle to “Manual Bypass.”
3. Press “Enter” to select. You will see the default setting “OFF” displayed on the LCD.
4. Use the “Function” button again to set Bypass to “ON” and press “Enter” again. UPS will go into “Manual Bypass Mode” with a display indication.

Restore

1. Check the UPS display; it should show “Manual Bypass Mode” with indications..
2. Press the” Function” button for 3 seconds and toggle to “Manual Bypass.”
3. Press “Enter” to select. You will see the setting as “ON” displayed on the LCD.
4. Use the “Function” button again to set Bypass to “OFF” and press “Enter” again.

UPS will return to Line-Mode.

APP-A. Troubleshooting

Troubleshooting procedures give simple instructions for determining UPS malfunctions. Start the troubleshooting procedure if you witness any alarm indication.

• Alarm

The UPS has an audible alarm. When different situations occur, UPS will alert users with a display and buzzer. Please refer to the troubleshooting chart below for detailed information.

• Silencing Alarm

Here are instructions on how to mute the active alarm or future alarm notification:

Note: if the battery is low on power, the alarm will sound regardless of the silent mode's enable/disable.

Silencing during Battery-Mode: Press any button when the alarm occurs.

- **Silent Mode:**

Configure on LCD to enable/disable all audio malfunction warnings.

If troubleshooting does not resolve your situation, feel free to contact us for technical assistance.

Situation Display	Alarm	Description & Solution
High Output Voltage	Constant beep	High output voltage. Please contact for technical assistance
Low output Voltage	Constant beep	Low output voltage. Please contact for technical assistance
Output short	Constant beep	Output short circuit. Please contact for technical assistance
Bus fault	2 beeps/seconds	High internal DC bus Voltage. Please contact for technical assistance
Over-temperature	2 beeps/seconds	High surrounding temperature. Ensure fan operation and ventilation are clear. Contact for technical assistance if the problem remains
Set wiring fault	1 beep/seconds	Wrong UPS input wiring between natural and line, turn the plug 180 degrees and plug it in.
Output overload	2 beeps/seconds	The connected load power requirement exceeds the UPS provision. UPS will switch to bypass mode when overloaded in line mode. Shut off less essential equipment connected to the UPS. UPS automatically switches back to normal when the problem resolves.
Over-charge	Constant beep	Battery overcharged, Turn off UPS and contact for technical assistance
Charger failure	N/A	The charger has failed. Contact for technical assistance
Battery failure	3 beep/5 seconds	The battery has failed. Contact for technical assistance
Line abnormal	1beep/seconds	Wrong AC line backed up during auto restart. Please Reconfirm your main power and frequency

Battery test	N/A	UPS battery test processing. UPS will return to normal operation after completion. No action needed
Battery mode	1 beep/ 5 second with display	The unit is operating with battery power. Secure your data and perform a controlled shutdown
Low battery	2 beep/5 seconds with display	UPS will shut down due to low battery voltage. The unit will restart automatically when sufficient power returns.

APP-B Technical Specifications

For all models:

- While 208V output capacity will be derated to 90%.
- Specifications are subject to change without further notice.
- Specifications are for reference; actual information should be based on the real product.

Notice:

For the 120V model (1.5K, 2K, 3K), the input 1100-volt ratings must be derated by 10% to meet UL current requirements.

Tower Model	1000	1500	2000	3000
Configuration				
Capacity (VA)	1000 VA	1500 VA	2000 VA	3000 VA
Capacity (Watts)	900 W	1350 W	1800 W	2700 W
Form	Tower Type			
Phase	Single Phase			
Energy Saving	Yes – ECO Mode Efficiency >94%			
Input				
Voltage	100 / 110 / 115 / 120 / 127 Vac or 208 / 220 / 230 / 240 Vac			
Input Voltage Range (110 Vac)	60 – 144 VAC, < 25% Load			
	70 – 144 VAC, < 50% Load			
	80 – 144 VAC, < 75% Load			
	90 – 144 VAC, < 100% Load			

Input Voltage Range (220 Vac)		120 – 276 VAC, < 25% Load			
		140 – 276 VAC, < 50% Load			
		160 – 276 VAC, < 75% Load			
		180 – 276 VAC, < 100% Load			
Input Frequency Range		50 / 60 Hz (Auto Sensing)			
Input Power Factor		>0.97			
Cold Start		Yes			
Output					
Rated Power Factor		0.9			
Waveform		Pure Sine Wave			
Voltage		100 / 110 / 115 / 120 / 127 Vac or 208 / 220 / 230 / 240 Vac ± 2%			
Frequency		50 / 60 Hz ±0.25 Hz			
Transfer Time		0 ms			
Harmonic Distortion		≤ 2.5% THD at Linear Load			
Crest Factor		3: 1			
EPO Function		Yes			
Protection					
Overload	Line Mode	105% – 120% for 30 seconds 121% – 150% for 10 seconds			
	Battery Mode	101% – 109% for 10 seconds 110% – 120% for 3 seconds			
Surge Protection		IEC 61000-4-5 Level 3			
Bypass		Internal Bypass (Automatic and Manual)			
Short Circuit Protection		UPS Output Cut Off Immediately			
Battery					
Type	12V 7Ah	12V 7Ah	12V 7Ah	12V 7Ah	
Quantity	3	4	6	8	
Sealed, Maintenance Free		Yes			
Typical Recharge Time		4 hr to 90%			
External Battery Module		Option			
External Battery Connector		Option			

Management & Communication

Indicator	LCD Control Panel			
Communication Port	RS-232, USB B type			
SNMP Slot	Option			
Audible Alarms	Yes			
Physical				
Dimensions (WxDxH) (mm)	152 x 420 x 237	152 x 500 x 241	225 x 420 x 358	
Weight (kgs)	15.2	19.4	28.8	30
Shipping Dimensions (mm)	280 x 545 x 355	280 x 625 x 356	340 x 526 x 485	
Shipping Weight (kgs)	17.4	21.3	31.6	32.9

Configuration						
Capacity (VA)	1000 VA	1500 VA	2000 VA	3000 VA	2000 VA	3000 VA
Capacity (Watts)	900 W	1350 W	1800 W	2700 W	1800W	2700W
Form	Rack and Tower Type					
Phase	Single Phase					
Energy Saving	Yes – ECO Mode Efficiency >94%					
Input						
Voltage	100 / 110 / 115 / 120 / 127 Vac or 208 / 220 / 230 / 240 Vac					
Input Voltage Range (110 Vac)	60 – 144 VAC < 25% Load					
	70 – 144VAC < 50 % Load					
	80 – 144 VAC < 75% Load					
	90 – 144 VAC < 100% Load					
Input Voltage Range (220 Vac)	120 – 276 VAC, < 25% Load					
	140 – 276 VAC, < 50% Load					
	160 – 276 VAC, < 75% Load					
	180 – 276 VAC, < 100% Load					
Input Frequency Range	50 / 60 Hz (Auto Sensing)					
Input Power Factor	>0.97					
Cold Start	Yes					
Output						

Rated Power Factor		0.9				
Waveform		Pure Sine Wave				
Voltage		100 / 110 / 115 / 120 / 127 Vac or 208* / 220 / 230 / 240 Vac ± 2%				
Frequency		50 / 60 Hz ±0.25 Hz				
Transfer Time		0 ms				
Harmonic Distortion		≤ 2.5% THD at Linear Load				
Crest Factor		3: 1				
EPO Function		Yes				
Protection						
Overload	Line Mode	105% – 120% for 30 seconds 121% – 150% for 10 seconds				
	Battery Mode	101% – 109% for 10 seconds 110% – 120% for 3 seconds				
Surge Protection		IEC 61000-4-5 Level 3				
Bypass		Internal Bypass (Automatic and Manual)				
Short Circuit Protection		UPS Output Cut Off Immediately				
Battery						
Type		12V 7Ah	12V 7Ah	12V 7Ah	12V 9Ah	12V 7Ah
Quantity		3	4	6	6	8
Sealed, Maintenance Free		Yes				
Typical Recharge Time		4 hr to 90%				
External Battery Module		Option				
External Battery Connector		Option				
Management & Communication						
Indicator		LCD Control Panel				
Communication Port		RS 232, USB B type				
SNMP Slot		Option				
Audible Alarms		Yes				
Physical						
	Dimensions (WxDxH)(mm)	428 x 425 x 84	428 x 500 x 84	428 x 635 x 84	428 x 425 x 84	

Power Module	Weight (kgs)	16.3	17.9	29.8	32.6	10.1
	Shipping Dimensions (mm)	546 x 552 x 206	550 x 620 x 220	550 x 750 x 220 546 x 552 x 206		
	Shipping Weight (kgs)	19.4	21	33.9	36.5	13.2
Battery Module	Dimensions (WxDxH)(mm)	—	—	—		428 x 425 x 84
	Weight (kgs)	—	—	—		21 24.2
	Shipping Dimensions (mm)	—	—	—		546 x 552 x 206
	Shipping Weight (kgs)	—	—	—		23 26.2

FAQs

Q: What should I do if my UPS causes interference with my radio or TV reception?

A: If interference occurs, try the following preventive measures:

- Place the receiving antenna in a separate location or orientation.
- Ensure a greater distance between the receiver and the UPS.
- Connect the equipment to an outlet on a separate circuit. Contact a technician experienced with radio and TV or the dealer for assistance.

Documents / Resources

<p>UPS</p> <p>On-Line 1000VA-3000VA</p> <p>■ USER MANUAL ■</p>	<p>Bayview Technology VGS-ReadMe Type C Hybrid Cable [pdf] User Manual</p> <p>VGS-ReadMe, VGS VRT 1K-3K, VGS-ReadMe Type C Hybrid Cable, VGS-ReadMe, Type C Hybrid Cable, Hybrid Cable</p>
--	--

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.