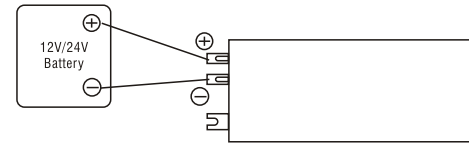


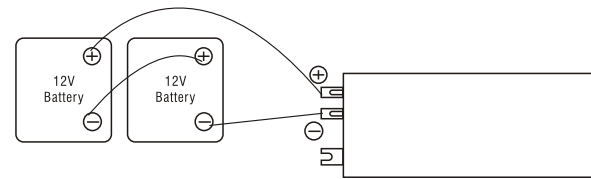
Step 3- connect battery cables to your batteries

The battery must be wired to match the units DC input voltage specifications

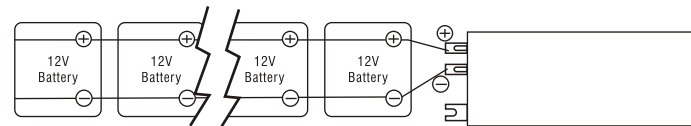


In addition, the batteries can be wired to provide additional run time. The various wiring configurations are as follows:

- **Series connection:** wiring batteries in "series" increases the total output voltage. This voltage MUST match the DC voltage requirements of the inverex unit, or it may damage both the inverex unit and/or the batteries.



- **Parallel connection:** wiring batteries in "parallel" increases the total run time, the batteries can operate the AC loads. The more batteries connected in parallel the longer run time the loads can be powered from the inverex unit.



SPECIFICATION

Model		G500	G1000/12V	G1000/24V	G2000
Capacity		500VA/300W	1000VA/600W	1000VA/600W	2000VA/1200W
AC input	Nominal voltage	110/115/120VAC or 220/230/240VAC			
	Nominal frequency	50Hz or 60Hz			
Input voltage range selector	Narrow	90~140VAC or 170-260VAC			
	Wide	50~145VAC or 90-280VAC			
Inverter mode output	Voltage	120VAC +10/-18% or 230 +10/-18%			
	Frequency	50/60Hz ±0.5Hz			
	Waveform	Modified sine wave			
	Efficiency (AC to AC)	> 95%			
	Efficiency (DC to AC)	> 80%			
Battery	Nominal voltage	12V			24V
	Charging voltage	15			30
Charger	Charging current	8A	13A	6A	12A
		7A max for 110/115/120V model			
	Overcharging protection	16			32
Transfer	Transfer time	Typical 15-20ms,30ms max			
Indicator	Line mode	Green LED blinks or lights steadily			
	Battery mode	Yellow LED lights			
	Overload/fault	Red LED blinks or lights steadily			
Audible alarm	Low battery voltage in battery mode	Beeps every 2 seconds			
	Overload	Beeps every 0.5 second.			
	Fault	Beeps continuously			
Environment	Temperature	0 ~ 40°C			
Physical	Dimension (mm) DXWXH	255x80x224			
	Net weight(Kg)	1.7Kg	2.1Kg	1.8Kg	2.6Kg
Protection	Deep discharge,overcharge,short circuit,overload,battery short,over voltage,under voltage				

Troubleshooting

Problem	Possible causes	Remedy
No LED display	Battery weak	Re-charge battery
	Battery defective	Battery replacement
	Power switch is not pressed	Press and hold power switch
Mains normal but works in inverter mode	AC Input missing	Check AC input connection
	Input protector is effective	Reset the input protector
Alarm buzzer beeps continuously	Overload	Verify that the load matches the capability specified in the specs
Back up time is shortened	Overload	Remove some non-critical load
	Battery voltage is too low	Charge battery for 8 hours or more

If any abnormal situations occur that are not listed above, please call service personnel immediately.

G series modified sine wave inverter

500VA/1000VA/2000VA

User's anual



General precautions

1. Before using inverter, read all instructions and cautionary markings on : (1) inverter (2) the batteries (3) this manual
2. **CAUTION** — to reduce risk of injury, charge only lead-acid rechargeable batteries. Other types of batteries may cause damage and injury.
3. Do not expose inverter to rain, snow or liquids of any type. Inverter is designed for indoor.
4. Do not disassemble inverter. Take it to a qualified service center when service or repair is required.
5. **WARNING:** provide ventilation to outdoors from the battery compartment. The battery enclosure should be designed to prevent accumulation and concentration of hydrogen gas at the top of the compartment.
6. **NEVER** charge a frozen battery.
7. Input/output AC wiring must be no less than 18 AWG gauge copper wire and rated for 75°C or higher. Battery cables must be rated for 75°C or higher and should be no less than 10AWG gauge. The inner diameter of the copper ring terminal which is used to connect battery cables to Inverter DC terminals should be no less than 6mm.
8. Be extra cautious when working with metal tools around batteries. Short-circuiting the batteries could cause an explosion.
9. Read the battery manufacturer's installation and maintenance instructions prior to operating.

Personnel precautions

1. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.
2. Avoid touching eyes while working near batteries.
3. NEVER smoke or allow a spark or flame in vicinity of a battery.
4. Remove personal metal items such as rings, bracelets, necklaces, and watches when working with batteries. Batteries can produce a short-circuit current high enough to make metal melt, and could cause severe burns.
5. If a remote or automatic generator start system is used, disable the automatic starting circuit or disconnect the generator to prevent accident during servicing.

Introduction

G is a DC-to-AC inverter with auto line-to-battery transfer and integrated charging system, serving as an extended run UPS, a standalone power source or an automotive inverter.

G supplies power from AC power and DC source. When AC cable is connected to a wall socket, utility power goes to connected equipment(s) and/or charges the battery set via charging system. In UPS mode, Inverter automatically convert battery energy into AC power for backing up the connected devices.

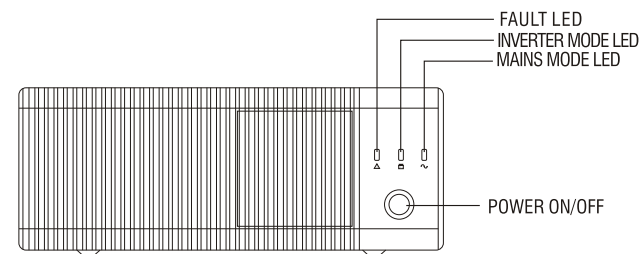
Features:

- Automatic line-to-battery switchover
- Selectable Input voltage ranges
- High efficient DC-to-AC conversion, minimizing energy loss
- Rack tower design for flexible placement
- Built-in enhanced charger
- Intelligent 2-stage charger control for efficient charging and preventing overcharge
- Provides overload protection
- Auto restart while AC recovery
- Multi-function LED indications and buzzer alarms

Operation & installation

Front panel controls and LED Indicators

Shown below are the controls and indicator lights on the front panel of G series.



Power on/off

power on/off button is shown as above. Once inverter has been properly installed and batteries are connected, press this button and inverter will turn on automatically, and works in mains mode or inverter mode according to input AC source's status. When press this button again, inverter will turn off automatically.

Mains mode LED

The green LED will blink or light steadily when power mains is normal.

Inverter mode LED

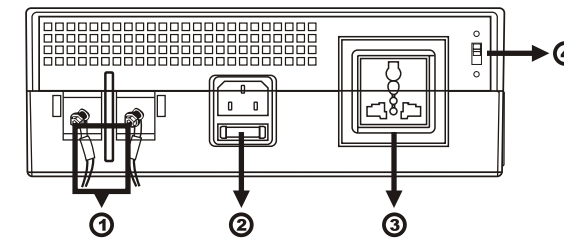
The Yellow LED will light when power mains is abnormal. And unit will work in inverter mode.

Fault LED

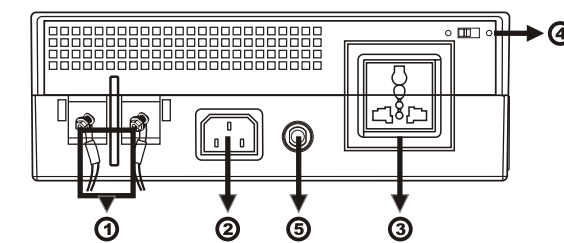
The red LED will light when fault occurs.

Back panel description

Shown below are the components on the back of inverter.



Rear view-1 □



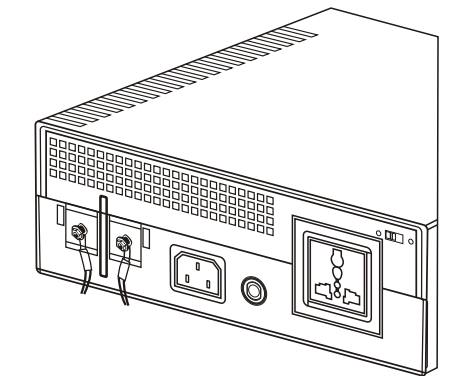
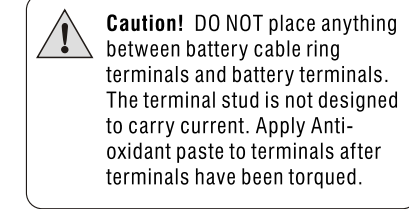
Rear view-2 □

1. DC input connector (battery terminal)
2. AC input connector
3. Output receptacle(s)
4. Input voltage range selector: input voltage range is defined in specification chapter, and output voltage is the same as input voltage in 'mains' mode.
 - A. Select '**Narrow**' setting for general electrical appliance
 - B. To save energy, "**Wide**" setting could be selectde only when using some special load, such as baylight lamp, fan etc.
5. Input protector

Battery connection

Step 1- take out the screw of the bottom of DC input cover and open it.

Step 2- Follow battery polarity guide located near battery terminal. Place the battery cable ring terminal over inverex's battery terminal. Tighten the M5 nut. Do not place anything between the flat part of battery terminal and the battery cable ring terminal, since overheating may occur.



Battery cable connection to INV - G500/1000/2000