



Trigger True Online double conversion **LineGuard** Series UPS is rated at 1kVA, 2kVA, 3kVA, 6kVA, 10kVA, 15KVA and 20KVA equipped to provide clean and quality backup power supply to the equipment supported.

Its tower design suits most installation in offices, banks, small Data Centre, to continuously provide power protection to enterprise servers, networking equipment, telecommunication systems, security system, and many other critical applications.

LineGuard Series UPS has the flexibility to offer solutions with standards unit that comes with built-in batteries and to provide extended backup time by adding more battery modules externally. Together with the power monitoring and management software, it could provide advance power management solution, allowing graceful, unattended, systematic shutdown and management of your valuables files and data during power failure and protection against power disturbances in most of the major operating platform.



Computer/
Server



Network
Peripherals



Telecom



Security



Key Features

- Online Double Conversion UPS
- Extendable runtime feature
- Management software solution
- SNMP / Dry Contact relay card (optional)
- Built-in Auto Bypass
- Full protection of over-voltage, short-circuit and over-temperature
- Automatic fan speed adjustment

LineGuard Series

1 / 2 / 3 / 6 / 10 / 15 / 20 KVA

UNINTERRUPTIBLE POWER SUPPLY

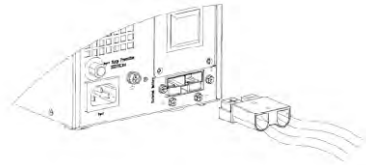


Battery Module for extended backup time

To achieve long backup time, it is possible to connect multiple battery modules but the principles of “same battery, same type” should be strictly followed.

The nominal voltage of external Battery Modules are as follows:

- 1KVA : 36VDC
- 2KVA : 72VDC
- 3KVA : 96VDC
- 6KVA : 192VDC
- 10KVA : 192VDC
- 15KVA : 192VDC
- 20KVA : 192 VDC



Control and Communication

UPS includes several communication ports: RS232, EPO, SNMP card, USB, Dry Contact, RS485.

NOTE: Only one of SNMP card, Dry Contact and RS485 can be use at any time.

Only one of RS232 and USB (Optional) is available at any time.

SNMP Card (Optional)

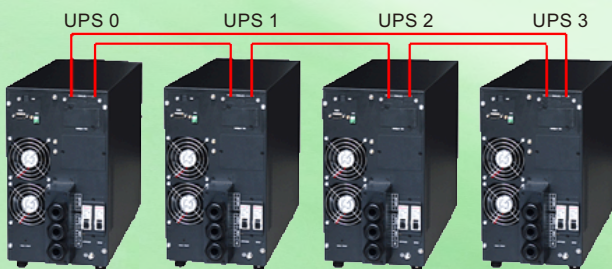
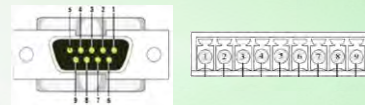
SNMP card is used to monitor the UPS via TCP/IP, user can check the UPS status, voltage and current on the internet.



Dry Contact (Optional)

There are two types of dry contact for option: DB9, phoenix terminal.

Max output current for dry contact is 1A.



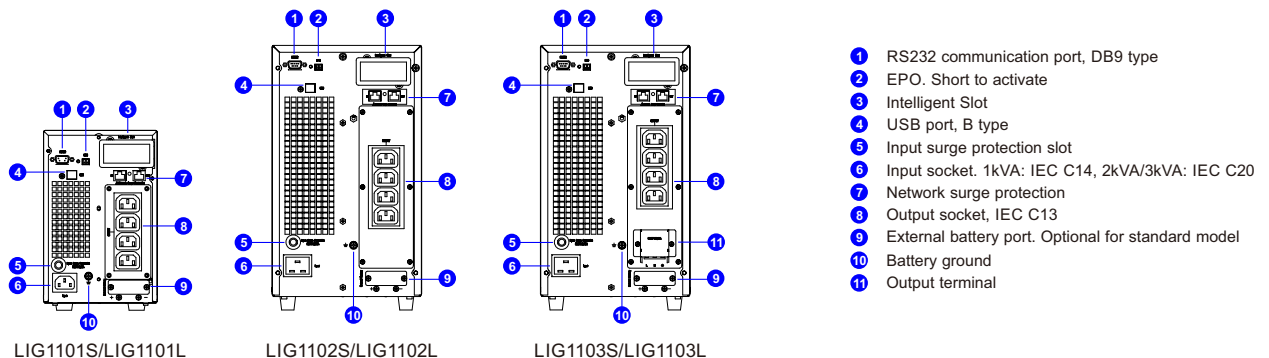
Parallel Port (Optional)

As long as the UPS is equipped with parallel cables, up to 4 UPS can be connected in parallel to obtain output power sharing and power redundancy.



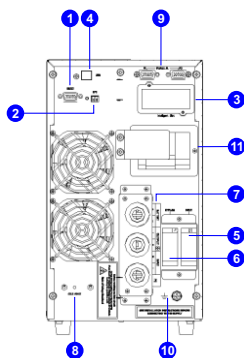
MODEL	LineGuard Series					
Model	LIG1101S	LIG1101L	LIG1102S	LIG1102L	LIG1103S	LIG1103L
CAPACITY						
Capacity (VA)	1 kVA		2 kVA		3 kVA	
Capacity (W)	0.9 kW		1.8 kW		2.7 kW	
INPUT						
Nominal Voltage	230 VAC					
Voltage Range	110 to 288 VAC (100% load @ >176VAC, 90% load @ >160VAC, 80% load @ >140VAC, 60% load @ >110VAC)					
Frequency	40 - 70 Hz					
OUTPUT						
Nominal Voltage	220/230/240 VAC					
Voltage Range	+1% to -1%					
Frequency	50/60 Hz					
Wave Form	Pure Sinewave					
Transfer Time	0 ms					
Total Harmonics Distortion (THD)	≤ 5.5% with Non-linear Load		≤ 5% with Non-linear Load		≤ 5% with Non-linear Load	
BATTERY						
Type	Valve-Regulated Maintenance Free Sealed Lead Acid					
Battery Rating	12V, 7AH	Dependable on external batteries	12V, 7AH	Dependable on external batteries	12V, 7AH	Dependable on external batteries
No. of Batteries	3		6		8	
DC Voltage	36 VDC		72 VDC		96 VDC	
Charging Current (max)	1A	8A	1A	8A	1A	8A
INDICATIONS						
LCD + LED	Input & Output Voltage, Current, Frequency, Load level / Battery capacity, Voltage / Bypass / Fault					
AUDIBLE ALARMS						
Battery Mode	Beeping every 2 minutes					
Battery Low on DC Mode	Beeping every 6 seconds					
Fault / Overload	Continuous Beeping					
ENVIRONMENT						
Operating Temperature	0° to 40°C (32° to 104°F)					
Relative Humidity	0% to 90% Non-condensing					
Noise Level at 1 meter	< 43dB @ < 70% load		< 45dB @ < 70% load		< 45dB @ < 70% load	
PROTECTION						
Overload Capability (Inverter)	105% ~ 130%: Transfer to bypass after 1 min					
Overload Capability (Battery)	105% ~ 130%: Shutdown after 10 secs					
COMMUNICATION						
Interface	Smart RS232 with bundled software, EPO					
SNMP (Optional)	Power Management from SNMP Manager and Web Browser					
Dry Contact (Optional)	DB9 port, Dry Contact					
PHYSICAL						
Dimensions (W x D x H) mm	144 x 353 x 222		190 x 374 x 336		190 x 427 x 336	
Weight (kg)	10.5	5	21	8.5	24.5	9.5
Outlets	(4) C13		(4) C13		(4) C13 + Terminal	
CERTIFICATIONS						
Safety Approvals	CE, RoHS (Optional)					

Note: The product specification listed is subjected to change without notice.

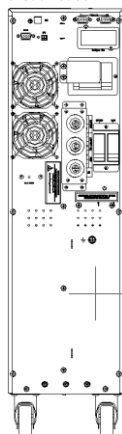


MODEL	LineGuard Series					
Model	LIG1106S	LIG1106L	LIG1110S	LIG1110L	LIG1115L	LIG1120L
CAPACITY						
Capacity (VA)	6 kVA		10 kVA		15 kVA	20 kVA
Capacity (W)	6 kW		10 kW		15 kW	20 kW
INPUT						
Nominal Voltage	230 VAC					
Voltage Range	110 to 288 VAC (100% load @ >176VAC, 90% load @ >160VAC, 80% load @ >140VAC, 60% load @ >110VAC)					
Frequency	40 - 70 Hz					
OUTPUT						
Nominal Voltage	220/230/240 VAC					
Voltage Range	+1% to -1%					
Frequency	50/60 Hz					
Wave Form	Pure Sinewave					
Transfer Time	0 ms					
Total Harmonics Distortion (THD)	≤ 1% with Linear Load; ≤ 5% with Non-linear Load					
BATTERY						
Type	Valve-Regulated Maintenance Free Sealed Lead Acid					
Battery Rating	12V, 7AH	Dependable on external batteries	12V, 9AH	Dependable on external batteries		
No. of Batteries	16	Dependable on external batteries		16	Dependable on external batteries	
DC Voltage	192 VDC					
Charging Current (max)	1A	5A	1A	5A		
INDICATIONS						
LCD + LED	Input & Output Voltage, Current, Frequency, Load level / Battery capacity, Voltage / Bypass / Fault					
AUDIBLE ALARMS						
Battery Mode	Beeping every 2 minutes					
Battery Low on DC Mode	Beeping every 6 seconds					
Fault / Overload	Continuous Beeping					
ENVIRONMENT						
Operating Temperature	0° to 40°C (32° to 104°F)					
Relative Humidity	0% to 90% Non-condensing					
Noise Level at 1 meter	< 52dB @ < 60% load; <56dB @ >60% load		< 56dB @ < 60% load; <58dB @ >60% load		< 62dB	
PROTECTION						
Overload Capability (Inverter)	125%: Transfer to bypass after 1 min				111% to 125%: Transfer to bypass after 1 min	
Overload Capability (Battery)	130%: Shutdown after 10 secs				131 to 150%: Shutdown in 1 min	
COMMUNICATION						
Interface	Smart RS232 with bundled software, EPO					
SNMP (Optional)	Power Management from SNMP Manager and Web Browser					
Dry Contact (Optional)	DB9 port, Dry Contact					
PHYSICAL						
Dimensions (W x D x H) mm	190 x 426 x 705	190 x 426 x 336	190 x 485 x 705	190 x 485 x 336	190 x 485 x 480	
Weight (kg)	56	14	60	16	30	
Outlets	Terminals					
CERTIFICATIONS						
Safety Approvals	CE, RoHS (Optional)					

Note: The product specification listed is subjected to change without notice.



LIG1106L/LIG1110L



LIG1106S/LIG1110S

- 1 RS232 communication port, DB9 type
- 2 EPO. Normally Closed
- 3 Intelligent Slot
- 4 USB port, B type
- 5 Input breaker: surge protection
- 6 Bypass breaker: surge protection
- 7 Terminals for AC in/out and battery
- 8 Cold start button
- 9 Parallel port (Optional)
- 10 Battery ground
- 11 Reserved slot for manual bypass (Optional)