

LUMINOUS



HERCULES

1600



LUMINOUS CARE
EXPERTS SOLVING EVERY LASTING SUPPORT

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User Manual

1. INTRODUCTION

1.1. Welcome to the ever-increasing family of satisfied LUMINOUS users. All LUMINOUS products like the one you have just purchased undergo a stringent quality check. This instrument provides clean & reliable power to your home, office and commercial establishments and protects them from blackouts, etc. this product is designed to provide you an efficient performance with only minimal care and maintenance at your end. This manual will facilitate you to not only understand the basic working of the LUMINOUS device but will also facilitate the ease of its maintenance and use.

लूमिनस के सन्तुष्ट तथा निरन्तर बढ़ते वाले परिवार में आप का स्वागत है। लूमिनस के सभी प्रोडक्ट्स की क्वालिटी जाँच बड़ी कुशलता से की जाती है। यह उपकरण होम तथा ऑफिस उपकरणों को स्वच्छ एवं विश्वसनीय पावर प्रदान करता है और उन्हें ब्लैकआउट होने से बचाता है। लूमिनस के प्रोडक्ट्स इस तरह से डिजाइन किये जाते हैं ताकि यह आपको अच्छी परफार्मेंस देता है तथा इन की देखभाल कम से कम समय और कम से कम खर्च से हो सके। इस मैन्युअल के द्वारा आप को इस लूमिनस उपकरण के प्रारम्भिक कामकाज को समझने और इसकी देखभाल करने में सहायित मिलेगी।

1.2. LUMINOUS HERCULES 1600 provides backup power to Fan, Bulb, CFL, Tube light, TV, PC, Press, Heater etc. in the event of power failure.

लूमिनस हरक्युलीस 1600 बिजली चले जाने के बाद पंखे, बल्ब, सीएफएल, ट्यूब लाइट, कंप्यूटर, प्रेस, हीटर इत्यादि को बैकअप पावर प्रदान करता है।

1.3. Normally, the device operates on Mains, supplying power to the load from the utility input. The battery charger uses Mains power to keep the battery at an optimal level. When the power fails, the device transfers the load to the battery and converts the battery's DC power to AC power. The loads operate normally until the battery is exhausted. The load is automatically transferred back to the utility when the normal Mains get restored.

आमतौर पर उपकरण मेन्स पर काम करते हुए लोड को मेन्स से पावर प्रदान करता है। बैट्री चार्जर बैट्री को एक उचित स्तर पर रखने के लिए मेन्स से पावर लेता है। बिजली चले जाने पर उपकरण बैट्री पर काम करते हुए लोड देता है, जब तक बैट्री क्षमता समाप्त नहीं हो जाती। बिजली वापस आने पर लोड अपने आप बैट्री से मेन्स पर ट्रांसफर हो जाता है।

2. SAFETY GUIDELINES please go through these guidelines before connecting the device.

1. Always connect the device to a 230V, 10A/16A, 3 Pin type Mains socket with earthing. The socket must be connected to appropriately protected branch of the Mains (fuse/circuit breaker). Connection to any other type of socket may result in a shock hazard. Kindly ensure that ELCB/RCCB is not connected at either input or output.

उपकरण सदैव दो पोल तथा तीन तार ग्राउंडिंग मेन्स साकेट के साथ जोड़िये। साकेट को मेन्स की उचित सुरक्षित ब्रॉच (फ्यूज/ सर्किट ब्रेकर) के साथ जोड़ना चाहिए। किसी और प्रकार के साकेट से जोड़ने से बिजली का झटका लगने की संभावना रहती है। ELCB/RCCB का प्रयोग इनपुट और आउटपुट में न करें।

2. To Switch off the device output, in an emergency, use the switch on the front panel to switch the device off and disconnect the power cord from the Mains & remove at least one battery connector.

आपातकालीन अवस्था में उपकरण की आउटपुट बन्द करने के लिए सामने वाला बटन बन्द करें। पावर के तार को मेन्स से अलग कर दें। बैट्री का कम से कम एक कनेक्टर अलग कर दें।

3. Foreign particles and water must be avoided for the device. Always ensure that no objects containing a liquid are ever kept near the unit.

बाहरी कोई वस्तु या पानी उपकरण के अन्दर नहीं जाना चाहिए। इस बात को ध्यान रखना चाहिए कि गीला या तरल पदार्थ उपकरण के पास नहीं रखना चाहिए।

4. Avoid Installing the device in an excessively humid place or where there is water. Care must be taken to ensure that the device is kept away from heat emitting appliances such as a heater, blower, oven etc. The unit must also be placed in a manner that it avoids exposure to direct sunlight. The place of installation should be well-ventilated and easily accessible for servicing.

उपकरण ऐसे स्थान पर न रखें जहाँ पानी हो या अत्यधिक नमी हो। इस बात का विशेष ध्यान रखा जाए कि उपकरण को उन उपकरणों से दूर रखा जाए जिससे गर्म ताप निकलती है, जैसे हीटर, ब्लोअर और ओवन इत्यादि। उपकरण को ऐसे स्थान पर नहीं लगाना चाहिए जहाँ सीधी धूप आती हो। उपकरण रखने की जगह हवादार और सर्विसिंग के लिए सरलता से पहुँचने योग्य होनी चाहिए।

5. Don't allow any spark near battery. Be sure not to come in contact with battery acid by any means.

बैट्री के निकट कोई चिंगारी न आने दें। बैट्री के तेजाब से किसी भी तरह के सम्पर्क से बचे।

6. Place the battery compartment as near as possible to the device.

बैट्री को उपकरण के नजदीक ही लगाएँ।

7. Always switch off the device and disconnect mains when disconnecting the battery.

बैट्री को हटाने से पहले मेन्स को अवश्य बंद करें।

8. Do not open the device there are dangerous high voltages inside even when power is off, contact the company service engineer only if it is not working properly.

उपकरण को स्वयं ना खोलें और सहायता के लिए सर्विस इंजीनियर की मदद लें।

9. Replace the batteries and the fuse only with same rating and type.

बैट्री और फ्यूज को उसी रेटिंग के और मेक से ही बदलें।

DO'S & DON'TS

Do's

✓ Unplug and switch off the device before touching or cleaning the surfaces.

✓ Unplug the device from the wall outlet during a lightning storm.

Don'ts

✗ Don't block the side ventilation slots by cloth or other material it may result in fire hazard.

✗ Don't place the device near radiation or heat source.

✗ Don't install the device near kitchen sink, laundry, wash bowl, bath tub.

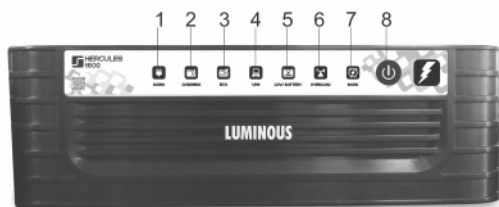
Do's related to battery

- ✓ Wear safety gloves and goggles.
- ✓ Use battery grade water only for battery refilling.
- ✓ Install battery in proper ventilated area.
- ✓ Apply petroleum jelly to terminals of batteries.
- ✓ Place battery horizontally & handle with care.
- ✓ Keep out of reach of children.
- ✓ Connect correct polarity of wires from device with battery.

Don'ts related to battery

- ✗ Don't add impure or mineral water in battery.
- ✗ Don't add acid to the battery as it can cause damage.
- ✗ Don't keep near a moisture area or in direct sunlight.
- ✗ Don't keep the cell caps loose or open.
- ✗ Don't increase the length of battery wire.
- ✗ Don't place the battery at height.
- ✗ Never short the terminals of the battery.
- ✗ Don't over fill the battery cells.
- ✗ Keep away flammable things to the battery.
- ✗ Don't dispose of batteries in fire.
- ✗ Don't open or mutilate batteries.
- ✗ Don't keep tools or metal parts on top of batteries.

3. PHYSICAL DESCRIPTION: The front panel display indicators & ON-OFF Switch



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1. ON MAINS : It glows when the commercial mains is available within normal limits (approx. 90-290V) as input to the unit in eco mode and (approx 180-260V) as input to the unit in UPS mode.

यह चमकता है जब कॉमर्शियल मेन्स इनपुट लगभग (90-290V) इको मोड में मिलती है और (180-260V) इनपुट यूपीएस मोड में मिलती है।

2. CHARGE : It monitors battery charge status & shall be ON/OFF as per the charge status of the battery. Charging indication turns OFF when the battery charging is about to be completed.

बैटरी के चार्ज की अवस्था की जांच करता है। इसका ऑन/ऑफ होना बैटरी के चार्ज की अवस्था पर निर्भर करता है। चार्जिंग इंडिकेशन लाईट बुझ जाती है जब बैटरी की चार्जिंग पूरी होने लगती है।

3. ECO : It glows when the operating mode is selected on ECO position via selection switch in back side of the system.

इंडिकेशन चमकेगा जब कॅबिनेट के पीछे दिया गया सेलेक्शन स्विच इको मोड में होगा।

4. UPS : It glows when the operating mode is selected on UPS position via selection switch in back side of the system.

इंडिकेशन चमकेगा जब कॅबिनेट के पीछे दिया गया सेलेक्शन स्विच यूपीएस मोड में होगा।

*** ECO & UPS indication also shows the status of front On/Off switch. When switch is in Off position ECO/UPS indication will be Off.**

5. BATTERY LOW : It glows when device trips due to battery energy getting exhausted.

बैटरी की क्षमता खत्म हो जाने के कारण जब उपकरण ट्रिप हो जाता है, तब यह चमकता है।

6. OVERLOAD : LED glows when the device is over-loaded in battery mode and it trips.

यह चमकता है जब उपकरण बैटरी मोड पर हो और उस पर क्षमता से अधिक लोड हो, और फिर उपकरण बन्द हो जाता है।

7. RAPID : It blinks when charging selection switch is on High Mode at Tubular, Flat and VRLA battery mode. Glows steadily when battery is in float mode.

जब बैटरी ट्यूबलर, फ्लैट या वि आर एल ए मोड में होगी और रैपिड चार्ज ऑन होगा तब यह इंडिकेशन टिमटिमाएगा। इंडिकेशन लगातार चमकता रहेगा जब बैटरी फ्लोट मोड में आ जाएगी।

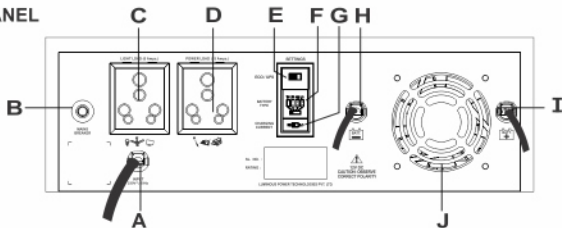
8. DEVICE ON/RESET SWITCH : This switch indicates whether device is ON/OFF. If the switch is Off the device will not work in the event of Mains failure, however the charging will continue. This switch also works as a reset in an event of over load, No load and battery low shut down.

यह स्विच दर्शाता है कि उपकरण ऑन है या ऑफ। यदि यह स्विच ऑफ है तो उपकरण मेन्स फेल की अवस्था में काम नहीं करेगा। यदि मेन्स सप्लाय ऑन है तो चार्जिंग निरन्तर होती रहेगी। यह स्विच ऑन/ऑफ के अलावा ऑवर लोड, नो लोड और बैटरी लो शटडाउन के लिये रीसेट का भी काम करता है।

*** Rapid is not applicable for local battery type selection.**

रैपिड लोकल बैटरी टाइप सेलेक्शन के लिए मान्य नहीं है।

3.1 THE BACK PANEL



A) MAINS LEAD : This is used to connect input AC supply (the commercial supply) to the device.

इसका प्रयोग मेन्स सप्लाय उपकरण से जोड़ने के लिए होता है।

B) MAINS BREAKER : This is connected at the input of the device and will trip in case of short-circuit or overload at output in Mains mode.

यह उपकरण की इनपुट से जुड़ा है। मेन्स की अवस्था में आउटपुट पर शार्ट सर्किट या ओवरलोड हो जाए तो यह ट्रिप हो जाएगा।

Note: Device should be connected with 32A Class C MCB at building distribution wiring for 1600 model.
नोट : 1600 मॉडल के लिए 32A क्लास सी एमसीबी को बिल्डिंग डिस्ट्रिब्यूशन वायरिंग से जुड़ा होना चाहिए।

C) LIGHT LOAD OUTPUT SOCKET (FOR CRITICAL LOADS) : This socket is provided for connecting the output of the device to the light loads (Fan, TV, Tube light, Bulb, CFL & PC) required to run during the full backup time of the system.

यह साकेट महत्वपूर्ण लोड (पंखा, टीवी, ट्यूब लाइट, बल्ब, सीएफएल और कंप्यूटर) को उपकरण के आउटपुट से जोड़ने के लिए है। चयन के अनुसार बैट्री लो कट ऑफ तक लोड चलाएगा।

D) POWER LOAD OUTPUT SOCKET (FOR NON-CRITICAL LOADS) : This socket is provided for power loads (Press, Heater, Mixer Grinder, Immersion Rod, Sandwich Maker & Toaster) connection with the Output of the device. The Loads connected with this socket are turned off before the Battery is totally exhausted thus ensuring more backup for the Loads connected with the Light Load Output socket. The Output is reconnected after battery capacity has been restored.

पावर आउटपुट साकेट का इस्तेमाल कम महत्वपूर्ण लोड (प्रेस, हीटर, मिक्सर ग्राइंडर, इमर्शन रॉड, सैंडविच मेकर और टोस्टर) के लिए करें। यह लोड 11.5 वोल्ट बैट्री वोल्टेज पर बंद हो जाएगा ताकि आपके महत्वपूर्ण लोड ज्यादा देर तक चल सकें और मेन्स के दुबारा आने के बाद यह लोड फिर शुरू हो जाएगा।

E) SWITCH

UPS MODE : Normally Switch should be kept in this mode while computer has to be run as this will ensure regulated voltage input of 180V to 260V which is suitable for most of the computers. If the input voltage goes beyond this limit, UPS will run on battery and will restore its operation in mains mode on restoration of normal mains. In this mode UPS LED will glow.

यूपीएस मोड : कम्प्यूटर चलाने के लिए सामान्यतया स्विच को इस मोड में रखें। इससे रेगुलेटेड 180 वोल्ट से 260 वोल्ट मिलेगा जो कम्प्यूटर के लिए उपयुक्त है। इनपुट वोल्टेज इस सीमा से बाहर होने पर यूपीएस बैट्री पर चलेगा और नॉर्मल मेन्स के चालू होते ही वापस मेन्स मोड में काम करेगा। इस मोड में यूपीएस एल ई डी चमकेगी।

ECO MODE : Keep Switch in this mode if computer is not to be used. In this mode, the UPS operates on wide Mains input voltage range of 90V to 290V. In this mode battery life is enhanced. In this mode ECO LED will glow.

ईको मोड : कम्प्यूटर नहीं चलाना हो तो सामान्यतया स्विच को इस मोड में रखें। इसमें यूपीएस 90 वोल्ट से 290 वोल्ट मेन्स इनपुट की बड़ी रेंज में काम करेगा। इस मोड में बैट्री का जीवन काल अधिक होगा। इस मोड में ईको एल ई डी चमकेगी।

Note: • Default setting - Eco Mode

• फेक्ट्री सेटिंग - ईको मोड में रखें।

F) BATTERY TYPE SELECTION : This switch should be selected as per battery type.

इस स्विच को बैट्री प्रकार के प्रति चयन किया जाना चाहिए।

Battery Type	Switch Selection
Tubular	TUB
Flat Plate	FLAT
SMF / VRLA	SMF
Local / Un-branded	LOC

G) HIGH CHARGING / LOW CHARGING : This switch should be selected as per connected battery capacity. This switch should be selected in high mode when battery capacity is higher than 135Ah. This switch should be selected in low mode when battery capacity is less than 135Ah.

इस स्विच का चयन बैट्री की क्षमता के अनुसार करें। इस स्विच को हाई मोड में रखें जब बैट्री की क्षमता 135Ah से अधिक हो। इस स्विच का लो मोड में रखें जब बैट्री की क्षमता 135Ah से कम हो।

"High Charge is not applicable for local battery type selection.

लोकल बैट्री टाइप सेलेक्शन के लिए हाई चार्ज मान्य नहीं है।

H) NEGATIVE BATTERY LEAD : The negative end of the battery is connected to this lead.

बैट्री का नेगेटिव सिरा इस लीड से जोड़ने के लिए होता है।

I) POSITIVE BATTERY LEAD : The positive end of the battery is connected to this lead.

बैट्री का पॉजिटिव सिरा इस लीड से जोड़ने के लिए होता है।

J) FAN : Cooling fan for thermal management.

थर्मल प्रबंधन के लिए पंखा।

4. UNPACKING & PLACEMENT

1. Unpacking: On receiving the device, inspect it for any transit damage. The packaging can be saved for future use.

उपकरण को लेते समय इस बात को सुनिश्चित कर ले कि यूपीएस क्षतिग्रस्त तो नहीं है। पैकिंग को भविष्य में उपयोग के लिए संभाल के रखें।

2. Placement: Device should be kept at a place which is protected from dust, water, temperature and humidity.

उपकरण को ऐसे जगह पर लगाएँ जो धूल, पानी, ताप और आर्द्रता से सुरक्षित हो।

5. INSTALLATION DIAGRAMS

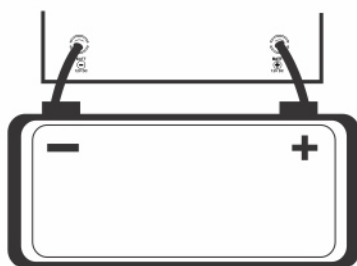
1). BATTERY INSTALLATION

CAUTION: Battery polarity must be checked before connections. Wrong polarity connection with device will causes Reverse Protection Fuse Blown and may lead to Fire Hazards.

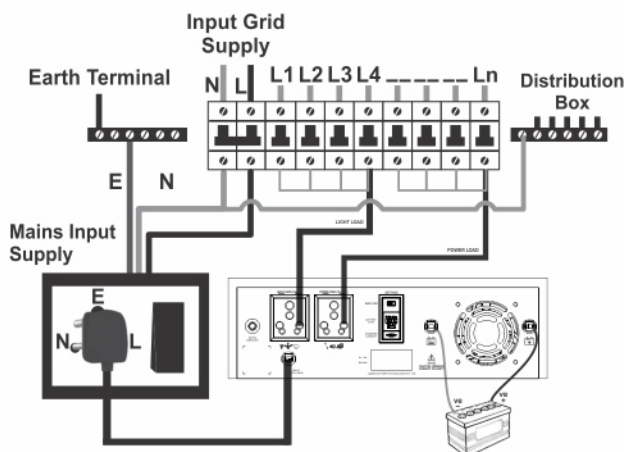
Installation shall be done by qualified technician.

- Take precautions while connecting the battery cable to the battery post, avoid short circuit by spanner etc.
- Battery terminals and thimble etc., should be cleaned and properly fastened otherwise it may give false indications of battery charged and low battery trips.

2). BATTERY CONNECTIONS WITH DEVICE



6. CONNECTION DIAGRAM WITH MAINS



Load Connection (should not be greater than system capacity)

7. STEPS FOR INSTALLATION:

- To be done by a competent & knowledgeable person.
- Switch OFF the supply to the distribution point to which the device is to be connected.
- Check the building wiring. Improper wiring will not prevent the device from operating but will limit its protection capability.
- Improper building wiring could result in equipment damage that is not covered in warranty.
- Connect the battery/batteries to device as per its correct polarity.
- Keep the front switch of device on OFF position.
- Switch ON the front switch & measures the output voltage on output socket, it should be as per specification & switch off the device.
- Connect the Load wire to the line point (right hole) of Output plug & insert the output plug into socket located on the rear panel of device.
- Switch ON the front Switch of the device.
- Gradually put the load on device.
- Connect input plug to commercial mains socket in correct polarity.

लगाने के तरीके:

- इंस्टालेशन दक्ष इंजीनियर द्वारा ही करा जाना चाहिए।
- उपकरण की मेन्स साप्लाई को बंद कर दें।
- वायरिंग की सही से जांच कर लें, गलत वायरिंग उपकरण की कार्यक्षमता और वारंटी पर असर डाल सकती है।
- बैट्री को उपकरण के साथ करैक्ट पोलैरिटी में जोड़े।
- उपकरण को स्विच ऑफ की स्थिति में ही रखें बैट्री कनेक्ट करने के बाद स्विच ऑन करें और आउटपुट वोलटेज माप लें, यदि यह निर्देशित रेंज में है तो स्विच ऑन कर दें।
- आउटपुट प्लग को आउटपुट सॉकेट में डालें और लोड ऑन करें।
- मेन्स इनपुट के प्लग को सही पोलैरिटी में इनपुट पाइंट में कनेक्ट करें।

8. TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE(S)	ACTION RECOMMENDED
A. The mains supply is normal but... a) The MAINS ON indicator is off.	<ul style="list-style-type: none">•Line cord plug is loose.•Dead wall socket.•Mains input voltage too low and too high.	<ul style="list-style-type: none">• Fit the line cord plug properly.• Check the socket with any lamp etc.• Wait for mains to normalize.
 b) The MAINS ON indicator is glowing but no Output is available	<ul style="list-style-type: none">• The reset switch has tripped.•Output plug may be loose.•Output Relay is not working.	<ul style="list-style-type: none">• Press the reset switch.•Fit the Output plug properly.•Contact authorised service person.
B. In the battery mode all indicators are off but the BATTERY LOW LED glows.	<ul style="list-style-type: none">•The battery may have got discharged from recent use.	<ul style="list-style-type: none">•Recharge the battery after mains restoration.
C. In the battery mode all indicators are off but the OVER LOAD LED is on...	<ul style="list-style-type: none">• The Long Back-up UPS has tripped due to overload condition	<ul style="list-style-type: none">• Reduce the load and turn the reset switch (on the front panel) on/off.
D. The MAINS ON LED is glowing but CHARGE LED is blinking.	<ul style="list-style-type: none">• The Charger failed.	<ul style="list-style-type: none">• Contact the Authorised Service Person.

9. WARRANTY

LUMINOUS POWER TECHNOLOGIES PVT. LTD. warrants its UPS to be free from defects in materials and workmanship. This obligation is limited to servicing any instrument or part returned to the authorised service centre for that purpose and to making good any parts thereof which shall, within the warranty period, be returned to the Company or authorised service centre under a written intimation and which to the Company's satisfaction be found defective. The Company reserves the right to decide as to whether the repair work should be carried out in the Company's service centre or at site or at any other place. The freight incurred for to and fro dispatch of the defective material will have to be borne by the customer and the transit risk for the material will rest with the purchaser.

The warranty covers all parts and will last for a period of 24 months from the date of sale to consumer / dispatch of the instrument if used within its specifications. The warranty for the replaced components will lapse along with that of the main instrument. **LUMINOUS POWER TECHNOLOGIES PVT. LTD.** reserves the right to make changes in design and specifications without notice and without any obligation to install such changes on units previously supplied.

In no event will the Company, that is **LUMINOUS POWER TECHNOLOGIES PVT. LTD.**, its Distributors and/ or Dealers be liable for personal injury, damages to property, consequential or incidental damages or for any expenses incurred by the buyer or user, due to use or sale of UPSs sold by **LUMINOUS POWER TECHNOLOGIES PVT. LTD.** directly or through its authorised Distributors/ Dealers or any third party under any circumstances, whether based on tort or breach of contract claims or on any other basis, to the extent these damages may be disclaimed by law. Except as expressly provided herein, the Company makes no warranties, and disclaims all warranties, representations and guarantees (whether expressly, implied or statutory), including, but not limited to, any implied merchantability or fitness for a particular purpose.

Until superseded otherwise or in contractual form, this warranty is made expressly in lieu of all other liabilities and obligations on part of **LUMINOUS POWER TECHNOLOGIES PVT. LTD.** Title to the instrument passes to the buyer upon delivery to the common carrier.

The warranty of your UPS shall become null & void if:

- Our instruments are warranted solely against poor workmanship and use of faulty material resulting in damage that may arise despite normal operation and usage of the appliance, as prescribed in the operating manual. This warranty does not cover any other aspect, including defects arising by reasons of accidents, abuse, misuse, neglect, improper installation (if not undertaken by the company or its representative), fire, flood or other act of God or any other natural calamities. Consequences of any other un-authorised repairs done or carried out will have to be borne by the purchaser.
- The problem of Thermal Circuit Breaker blown will not be included in the warranty of the product. The services given for the same will be a paid service.
- This warranty is not valid if the serial number and/or warranty seal of the Luminous UPS has been deleted, defected or altered.
- Any accessories (like battery, battery trolley, LED/LCD, plastic parts or any house hold goods etc.) connected to the instrument will not be covered under this warranty.
- All disputes for and/ or in connection with the instrument or the warranty in respect thereof shall be subject to the exclusive jurisdiction of courts of Delhi only.

IMPORTANT:

In the event of an instrument requiring servicing at our authorised service center, the following procedure should be adopted.

1. The instrument must be securely packed, preferably in its original packing.
2. The instrument should be despatched on Freight-prepaid basis duly insured.
3. One of our Service/ Sales Executives should be informed of the Goods Receipt No. and date of dispatch along with the name of the carrier.
4. Luminous reserve the right to charge the consignee for any damage incurred during transit.
5. This warranty card should be kept intact as the same will be required along with the original invoice to process the claim.

EQUIPMENT DETAILS

MODEL	
HERCULES 1600	Sr. No. :

*The actual product / color may vary from that shown in the manual.

10. SPECIFICATIONS

Model		1600
Apparent Power		1500VA
Active Power		1260W
	UPS mode	
Input	Rated Voltage	230V AC
	Under Voltage	180 ± 5V
	Under Voltage Restoration	190 ± 5V
	Over Voltage	265 ± 5V
	Over Voltage Restoration	255 ± 5V
	Eco mode	
	Under Voltage	90 ± 5V
	Under Voltage Restoration	105 ± 5V
	Over Voltage	290 ± 10V
	Over Voltage Restoration	280 ± 10V
Output	Rated Voltage (UPS Mode)	220V AC
	Voltage (Mains Mode)	Same as Input
	Frequency (UPS Mode)	50± 0.5Hz
	Frequency (Mains Mode)	Same as Input (45-55 Hz.)
	Overload	> 110 %
	Transfer Time (typical)	≤8 ms.
	Protection	Short-circuit, Overload, Over Temperature
Battery	Type	Tubular, Flat Plate, SMF(VRLA) & Local
	Voltage/Ah	12V/135Ah-220Ah
	Number	1
	Typical Recharge Time	8-10 Hrs.
	Charging Current (Normal and Rapid selection)	Local-13A, Flat/VRLA-16A & 20A Tubular –20A & 27A
Physical	Protection	Low Battery, Reverse Polarity, Over Charge and Deep Discharge
	Net Weight (Kg.)	14.69
	Gross Weight (Kg.)	15.20
	Dimensions (LxWxH)(mm)	402x320x150
LED Display	Mains On	Mains On Steady
	Charge	Charge (Along with Mains On LED)
	ECO	ECO Steady
	UPS	UPS Steady
	Overload	Overload Steady
	Battery Low	Battery Low Steady
	Low Battery Pre-Alarm	Low Battery blinking
	Short Circuit	Overload LED blinking
	Thermistor Open	Mains ON LED blinking+Overload LED blinking
	Thermistor Short	Mains ON steady+Overload LED steady
	Charger Fail	Charging LED blinking
	DC Overvolt	Mains ON LED blink+Charging LED blink
	Rapid	Rapid LED blinking
Alarms	Low Battery Pre-Alarm	UPS Beeping after every 90 seconds
	Low Battery Trip	UPS Beeping Continuously for 10 Seconds
	Mains to UPS	UPS Beeping every 2 Seconds for 5 Times
	Overload	UPS Beeping Continuously for 10 Seconds
	Short Circuit	UPS Beeping Continuously for 10 Seconds
	No Load Shut Down	UPS Beeping Continuously for 10 Seconds
	ECO/UPS mode change	2beeps
Environmental	Operating Temperature	0-45°C (32-113°F)
	Storage Temperature	0-45°C (32-113°F)
	Humidity	0-95% RH non-condensing

Due to continuous product improvement, the specifications are subject to change without notice.