<u>Luminous</u>





700

Sine Wave





User Manual

1.INTRODUCTION

पर टाँसफर हो जाता है।

- 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.

लमिनस के सन्तष्ट तथा निरन्तर बढ़ने वाले परिवार में आप का स्वागत है। लमिनस के सभी प्रोडक्टस की क्वालिटी जाँच बडी कुश्लता से की जाती हैं। यह उपकरण होम तथा ऑफिस उपकरणों को स्वच्छ एवं विश्वसनीय पावर प्रदान करता है और उन्हें ब्लैकआउट होने से बचाता है। लुमिनस के प्रोडक्टस इस तरह से डिजाइन किये जाते हैं ताकि यह आपको अच्छी परफारमेन्स दें तथा इन की देखभाल कम से कम समय और कम से कम खर्चे से हो सके। इस मेनुअल के द्वारा आप को इस लुमिनस

उपकरण के प्रारम्भिक कामकाज को समझने और इसकी देखभाल करने में सहलियत मिलेगी।

- 1.2. Luminous Eco Volt Neo 700 Sine Wave UPS provides backup power to load (fan, bulb, mobile, laptop etc.) लुमिनस इको वोल्ट निओ 700 साइन वेव यूपीएस बिजली चले जाने के बाद पंखे, बल्ब, कम्पयूटर 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। बैट्टी चार्जर बैट्टी को एक उचित स्तर पर रखने के लिए मेन्स से पावर लेता है। बिजली चले जाने पर उपकरण बैटी पर काम करते हए लोड देता है. जब तक बैटी क्षमता समाप्त नहीं हो जाती। बिजली वापस आने पर लोड अपने आप बैटी से मेन्स
- 2. SAFETY GUIDELINES please go through these guidelines before connecting the device.
- 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 मेंन्स साकेट के साथ जोड़िये। साकेट को मेन्स की उचित सुरक्षित ब्रॉच (फ़यूज / 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.

1. Always connect the device to a 230V, 10A/16A, 3 Pin type Mains socket with earthing. The socket must be

कनैक्टर 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.

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

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 नही 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

उपकरण ऐसे स्थान पर न रखें जहां 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 जहां सीघी ध्रूप आती हो। उपकरण रखने की जगह हवादार और सर्विसिंग के लिए सरलता से पहंचने योग्य होनी चाहिए।
- 5.Don't allow any spark near battery. Be sure not to come in contact with battery acid by any means. बैटी के निकट कोई चिंगारी न आने दें। बैटी के तेजाब से किसी भी तरह के सम्पंक से बचे।
- Place the battery compartment as near as possible to the device. बैटी को उपकरण के नजदीक ही लगाएँ।
- Always switch off the device and disconnect mains when disconnecting the battery. बैटी को हटाने से पहले मेन्स को अवश्य बंद करें।
- service engineer only if it is not working properly. उपकरण को स्वंय ना खोलें और सहायता के लिए सर्विस इंजीनियर की मदद लें। Replace the batteries and the fuse only with same rating and type.
- बैटी और पयुज को उसी रेटिंग के और मेक से ही बदलें।

and easily accessible for servicing.

DO'S & DON'TS

8.Do not open the device there are dangerous high voltages inside even when power is off, contact the company

Do's

- ✓ Unplug and switch off the device before touching or cleaning the surfaces.
- ✓ Unplug the device from the wall outlet during a lightening storm.
- Don'ts
- × Don't block the side ventilation slots by cloth or

wash bowl, bath tub.

- other material it may result in fire hazard.
- × Don't place the device near radiation or heat source.
- x Don't install the device near kitchen sink, laundry,

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.

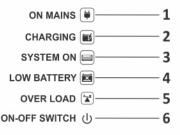
Don'ts related to battery

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

3A PHYSICAL DESCRIPTION:

FRONT PANEL: - Display indicators & ON-OFF Switch





1.ON MAINS: Glows when the commercial Mains is available within normal limits (approx. 100-285V) as input to the unit in unregulated UPS mode and (approx. 180-260V) as input to the unit in regulated UPS mode. यह चमकता है जब कर्मिशयल मेन्स इनपट लगभग (approx, 100-285V) अनरेगलेटेड यपीएस मोड में मिलती है और (approx, 180-260V) इनपट रेगलेटेड यूपीएस मोड में मिलती है।

2. CHARGING: It indicates battery charging status and 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 इन्डिकेशन बंद हो जाता है जब बैटरी की चार्जिंग पुरी होने लगती है।

3. SYSTEM ON:

तो चार्जिंग जारी रहेगी।

a) ECO Mode: Glows when the ECO/UPS switch at back-panel is selected as ECO.

यह तब चमकती है जब बैक पैनल में लगा स्विच ऑन हो और इको / यूपीएस मोड इको में सेलेक्टिड हो।

b) UPS Mode: Glows when the ECO/UPS switch at back-panel is selected as UPS.

यह तब चमकती है जब बैक पैनल में लगा स्विच ऑन हो और इको / यूपीएस मोड यूपीएस में सेलेक्टिड हो।

4. LOW BATTERY: Glows when device trips due to battery energy getting exhausted.

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

5. OVER LOAD: Glows when the device is overloaded in battery mode and it trips.

चमकता है जब उपकरण बैटी मोड पर हो और उस पर क्षमता से अधिक लोड हो, साथ ही बन्द हो जाता है।

6. POWER / RESET SWITCH / MODE SELECTION SWITCH:

6.1 POWER / RESET SWITCH: This switch indicates whether UPS is ON or OFF. If the switch is OFF the device will not work in the event of Mains failure, however the charging will continue if Mains is in normal limit. यह स्विच संकेत करता है कि उपकरण चालू है या बंद है। यदि स्विच बंद है तो यूपीएस मेन्स ना होने के कारण काम नहीं करेगा। हालांकि मेन्स सामान्य सीमा में है

6.2 MODE SELECTION FROM FRONT SWITCH:

This is used for selection of ECO/UPS mode, press & hold for 2-3 second to set the ECO/UPS mode.

Default mode is ECO mode. UPS/ECO Mode Indicated by UPS /ECO LED.

यह रिवच यूपीएस / ईको मोड को इस्तेमाल करने में प्रयोग होता है। यूपीएस / ईको मोड को इस्तेमाल करने के लिए 2–3 सैकेंड तक दबाएं रखें। डिफाल्ट मोड ईको मोड होता है। यूपीएस / ईको मोड को यूपीएस / ईको एल ई डी दर्शाती है।

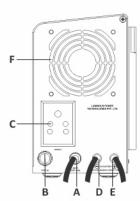
A) ECO MODE I/P Range: In this Mode UPS will work on available mains range of (100-290V).

इस मोड में यूपीएस तब काम करेगा जब मेन्स रेंज (100 वोल्ट से 290 वोल्ट) तक होगी।

लोड मेन्स मोड में अंतरित हो जाता है। युपीएस मोड मे जाने के लिए सामने क स्विच को 2-3 सैकेंड तक दबाए।

B) UPS MODE I/P Range: Normally switch should be kept in this mode while computer has to be run. It 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, then load transferred to UPS mode from Mains. On restoration of normal Mains the load is transferred to Mains mode. Press front switch for 2-3 second to change it to UPS mode. जब कंप्यूटर चलाना हो तो आमतौर पर रिवच को इस मोड में रखना चाहिए। यह 180 वोल्ट से 260 वोल्ट का रेग्यूलेटिड वोल्टेज सुनिश्चित करेगा जो अधिकांश कंप्युटरों के लिए उपयुक्त है। यदि इनपूट वोल्टेज इस सीमा को पार करती है तो मेन्स से लोड युपीएस मोड में हस्तारित हो जाता है। सामान्य मेन्स बहाल होने पर

3B. BACK PANEL



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

इस लीड का प्रयोग मेन्स सप्लाई को उपकरण से जोडने के लिए होता है।

(B) MAINS INPUT FUSE: This is connected at the input of device & will blow in case of short-circuit or overload in mains mode. यह उपकरण के इनपुट पर जुड़ा होता है तथा शॉर्ट—सर्किट या मेन्स मोड में ओवरलोड होने पर खुल जाएगा।

Caution: In case this fuse blows, disconnect the Mains prior to replacing the fuse to avoid electrical shock. Connect the Mains again after the fuse replacement with a new fuse of same rating.

सावधानियाः अगर चार्जर फ्यूज खराब हो जाता है तो फ्यूज को बदलने से पहले यूपीएस का मेन्स (शॉक लगने से बचने के लिए) बन्द कर दें और नया समान रेटिंग का फयुज लगाने के बाद दोबारा मेन्स चालु कर दें।

Note: UPS should be connected with 16A Class C MCB at building distribution wiring for 700 model.

नोटः 700 मॉडल के लिए 16A क्लास सी एमसीबी को बिल्डिंग डिस्ट्रिब्युशन वायरिंग से जुड़ा होना चाहिए।

(C) OUTPUT SOCKET: This socket is provided for connecting the output of the device to the load.

यह साकेट लोड को उपकरण के आउटपुट से जोड़ने के लिये होता है।

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

बैटी का नेगेटिव सिरा इस लीड से जोडने के लिए होता है। (E) POSITIVE BATTERY LEAD: The positive end of the battery is connected to this lead.

बैटी का पॉजिटिव सिरा इस लीड से जोडने के लिए होता है।

Recommended battery capacity: 80Ah-150Ah 12V.

बैटी चनने के दिशा निर्देश: 80Ah-150Ah 12V.

(F) FAN: Cooling fan for thermal management.

र्थमल प्रबंधन के लिए पंखा।

4. 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.

5. UNPACKING & PLACEMENT

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

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 रखे।

2. Placement: Device shall 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।

6. INSTALLATION PROCEDURE:

Place it on the wall where you want to mount the unit.

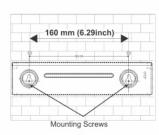
· Insert the gitti provided with the product, with a hammer in the hole.

- With the help of ruler, mark the holes accordingly on the wall as shown in the manual.
- Remove the ruler and drill two holes in the marked position of wall using 6mm drill bit.
- Place the screws provided with the unit or any 6*35 self-thread screw in the gitti and hammer it till 5mm of the screw is left outside the wall.
- Hang the product by matching the holes in product with the screws and check that the product has been placed properly.

इन्स्टालेशन प्रक्रिया :

- रूलर को दीवार पर वहां लगाएं जहां आप उपकरण लगाना चाहते हैं।
- मैनुअल में दिखाए गए आयामों को रूलर की सहायता से दीवार पर निशान बना लें।
- रूलर को हटा लें और दीवार पर निशान लगी जगह दो सराख कर दें। इसके लिए 6 मिमी डिल बिट इस्तेमाल करें।
- उत्पाद के साथ मिली गिट्टी को हथीड़े से दीवार में ठोक दें।
- गिट्टी में उपकरण के साथ दी गई पेंच या कोई 6*35 सेल्फ-थ्रेड पेंच लगा कर इस तरह ठोकें कि 5 मिमी पेंच दीवार से बाहर रह जाए।
- उत्पाद की सुराखों को पेंच से मिला कर उत्पाद टांग दें और ध्यान रखें कि उत्पाद सही से लगे।









7. STEPS FOR DEVICE 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 building wiring could result in equipment damage that is not covered in warranty.
- Connect the battery/batteries to device as per its correct polarity as shown in figure-1.
- Keep the front switch of device on OFF position.
 Switch ON the front switch & measures the O/P voltage on O/P 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 O/P plug into socket located on
- the rear panel of device figure-2.
- Switch ON the front Switch of the device.
- Gradually put the load on device.
- Connect input plug to commercial mains socket in correct polarity.

उपकरण लगाने के तरीके:

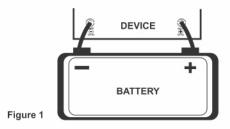
- इंस्टालेशन दक्ष इंजीनियर द्वारा ही करा जाना चाहिए।
- उपकरण की मेन्स सप्लाई को बंद कर दें।
- वायरिंग की सही से जांच कर लें, गलत वायरिंग उपकरण की कार्यक्षमता पर असर डाल सकती है।
- बैटी को उपकरण के साथ करैक्ट पोलेरिटी में जोडे।
- उपकरण को रिवच ऑफ की रिथति में ही रखें बैट्री कनैक्ट करने के बाद रिवच ऑन करें और आउटपुट वोलटेज़ माप लें, यदि यह निर्देशित रेंज में है तो रिवच ऑफ कर दें।
- आउटपुट प्लग को आउटपुट सॉकेट में डालें और लोड ऑन करें।
- मेन्स इनपुट के प्लग को सही पोलेरिटी में इनपुट पांइंट में कनैक्ट करें।

8. INSTALLATION DIAGRAMS

1), BATTERY INSTALLATION

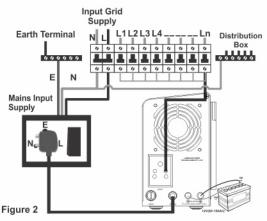
CAUTION: Battery polarity must be checked before connections. Wrong polarity connection with device will causes Reverse Protection Fuse Blown and may lead to Fire Hazards.

a). BATTERY CONNECTIONS WITH DEVICE



b). CONNECTION DIAGRAM WITH MAINS

off but OVERLOAD indication is blinking.



Load Connection (should not be greater than system capacity)

9. TROUBLESHOOTING			
PROBLEM	POSSIBLE CAUSE(S)	ACTION RECOMMENDED	
A. The Mains supply is normal but a) The Mains ON indicator is off. The device is either working on battery (System ON indicator is glowing) or battery has exhausted (LOW BATT. is glowing)	Line cord plug is loose. Dead wall socket. Mains input fuse blown. Mains input voltage too low or too high.	 Fit the line cord plug properly. Check the socket with any lamp etc. Check the Mains input fuse. Wait for Mains to normalize. 	
b) The Mains ON indicator is glowing but no output is available.	Output plug may be loose.Output relay is not working.	 Fit the output plug properly. Contact service authorised person. 	
B. In the battery mode all indicators are off but the BATT. LOW+System ON Indicator glows.	The battery may have got discharged from recent use.	Recharge the battery after Mains restoration	
C. (a) In the battery mode all indicators are off but the OVERLOAD+System ON indication is constant.	The device has tripped due to overload condition	Reduce the loads and turn the reset switch (on the front panel) on/off.	
(b) In the battery mode all indicators are	 The device is tripped due to 	Switch off all loads and then turn on	

short circuit in device mode.

load one by one and if 'OVER LOAD' blinking indication takes place again, call for authorised technician.

10. WARRANTY

LUMINOUS POWER TECHNOLOGIES PVT. LTD. warrants it's 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 TECHNÓLOGIES 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,
- · 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.

- 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



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

11. SPECIFICATIONS

Model		700	
Apparent Power Active Power		600VA	
	UPS mode	504W	
Input	Rated voltage	220V AC	
	Undervoltage		
	Undervoltage Restoration	180±5V	
	Overvoltage Restoration	185±5V	
		265±5V	
	Overvoltage Restoration	255±5V	
	ECO mode	00.51/	
	Undervoltage	90±5V	
	Undervoltage Restoration	105±5V	
	Overvoltage	290±10V	
	Overvoltage Restoration	280±10V	
Output	Rated voltage (UPS)	220V AC	
	Voltage (Mains Mode)	SAME AS INPUT	
	Frequency (UPS Mode)	50Hz. ±0.5%	
	Frequency (Mains Mode)	SAME AS INPUT (45-55 Hz)	
	Overload	> 110%	
	Transfer Time	< 20 ms.	
Battery	Туре	80Ah-150Ah Lead Acid Type	
	Number	1	
	Typical Recharge Time	10-12 Hrs.	
	Protection	Low Battery, Reverse Polarity	
	Net weight (Kg.)	6.4	
Physical	Gross weight (Kg.)	7.0	
,	Dimension (LxWxH) mm	232x123x196	
LED Disp- lays	Power Switch ON (SYSTEM ON Mode)	SYSTEM ON Indication (As per mode selection)	
	Low Battery	LOW BATTERY + SYSTEM ON (As per mode selection) Indication Steady	
	On Mains	ON MAINS + SYSTEM ON (As per mode selection) Indication Steady	
	Charging ON	ON MAINS + CHARGING + SYSTEM ON (As per mode selection) Indication Steady	
	Overload	OVERLOAD + SYSTEM ON (As per mode selection) Indication Steady	
Alarms	Overload Buzzer Sound	UPS Beeping continuously for 10 Sec.	
	Short Circuit On Batt. Mode	UPS Beeping continuously for 10 Sec.	
Enviro- mental	Operating Temperature	0-45° C (32-113°F)	
	Storage Temperature	0-45° C (32-113°F)	
	Humidity	0-95% RH non-condensing	
		he specification are subject to change without notice.	

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