

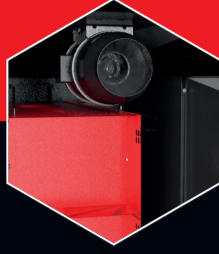
nothing charges safer than volthub™

» PROACTIVE CARE FOR YOUR BATTERIES



Power cut-off when the internal temperature reaches 60°C or more

Lithium-ion batteries are more likely to enter into thermal runaway above 60°C. The VoltHub features a critical temperature cut-off that will cut power to the lockers if the internal temperature exceeds 60°C. The fan will continue to run, cooling the internal temperature down to below 60°C. This is where charging can resume.



Forced ventilation to keep air flowing through the VoltHub

Batteries are very sensitive to a change in temperature, so the internal fan activates at 20°C to maintain a suitable charging environment. This keeps batteries at their optimum charging temperature, and proactively keeps them cool, which increases charging efficiency. The fan offers hygrothermal performance, responding to an internal enclosure temperature of 20°C or 50% relative humidity.



Thermostatic heater keeps the temperature at optimum levels

Lithium-ion batteries are sensitive to sub-zero charging conditions where charging below 0°C can cause irreparable damage to the batteries. Most battery chargers will cut out at lower temperatures, so the heater ensures the internal temperature stays above freezing.



Isolator switch for power to the VoltHub

The isolator switch is used to turn power on and off to the unit, but all other systems such as climate control and emergency alert systems are fully automated and activate when needed.



The fire suppression and alert systems will still operate without mains power

Even if there is no power supply to the unit, the fire suppression, alarm, smoke detector and GSM text alert will still continue to function. Therefore even if you are not charging batteries, it is still a proactive solution for storing them in the VoltHub, whilst all other internal control systems are fully automatic.

» REACTIVE CARE FOR YOUR BATTERIES



Visual and audible alarm when there is a fire

This alerts you that there is a fire inside the VoltHub and you need to make contact with emergency services. The alarm is also designed to trigger if there is a fault with the electrical system or the fire suppression.



Fire suppression system for responding to li-ion battery fires

Certified fire suppressant, specific for dealing with Lithium-ion fires. It is a localised suppressant that deals with the fire directly should a battery catch fire. It brings instantaneous cooling, and helps to contain and isolate the fire to the single compartment, reducing the risk of thermal propagation. The suppression is fully biodegradable and all waste will be contained within the bunded sump of the VoltHub.



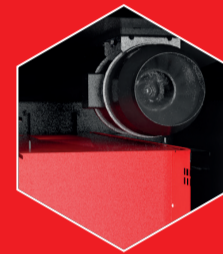
GSM phone and text alert when there is a fire

If the fire suppression system activates, or any off-gases or smoke be detected, the alert system will text or call up to three pre-programmed mobile numbers, by text and phone call that there is a fire within the VoltHub, allowing you to deal with the fire quickly and call emergency services.



Early gas and smoke detection

When a battery goes into thermal runaway, it begins venting dangerous gases, the GSM will then alert you to this and the power supply for the sockets is cut off. However, the forced ventilation will continue to operate and exhaust these gases.



Humidity sensor

If relative humidity is above 50%, the fan and heater will activate automatically to reduce moisture in the air.

» MOBILITY



Fits through a standard width doorway

At only 750mm deep, the VoltHub can easily fit through standard doorways, ensuring you can easily move it to different rooms on your site.



Mobility

Crane lifting eyes, forklift pockets and heavy-duty castors for ease of manoeuvrability

volthub



» EXTRA FEATURES



Robust build

It is built for the construction site, and designed to be both user friendly for construction workers as well as robust enough to withstand the environment



Repairable after a fire

If there happens to be a fire within the unit, it is unlikely to write off the whole product. This makes it easy to re-commission and helps to protect your investment.



Fully biodegradable non-toxic fire suppression foam

Means that it is not harmful for the environment



Weatherproof (certified IP55 rated)

The VoltHub can be used inside or outside. If you want to use it outside, it takes the risk away from a building and helps isolate the issue if there was to be a battery fire.



RCD individually protected sockets

With 16x RCD trip protected double gang sockets (32 sockets in total), if there is an electrical fault within any of the compartments, power will be isolated to that individual compartment only whilst power remains to all other sockets. Therefore, other workers using the VoltHub won't be disturbed and their batteries will continue to charge.



Maintenance free

Aside from routine checks on the pressure gauge on the fire suppression and an annual check to meet British regulations, there is no mechanical maintenance required on the product.



Larger lockers

To cater for the larger batteries on the market you can still charge these within VoltHub



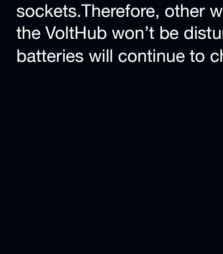
Security doors on the front

The IP rated doors on the outside are highly secure. Each of the 16 individual lockers can be padlocked and used independently.



Safety signage

Clear safety signage ensures people around are aware of the charging facility.



Patent pending GB2301393