



DFW/North Texas Mesh

Mesh Node Safety

Battery Safety

Though various size and capacity batteries can often be used, two varieties are often considered standard. Lithium Ion (*Li-Ion*) Batteries and Lithium Polymer (*LiPo*) Batteries.



LiPo

Most people are everyday users of LiPo batteries. They are commonly used in devices such as smartphones, tablets, laptops, drones, and radio-controlled vehicles. They are favored for their lightweight and thin form factor, making them ideal for portable electronics and applications where space is limited. LiPo batteries are also used in medical devices such as pacemakers, hearing aids, and insulin pumps.

Li-Ion

With their lightweight design and powerful output, Li-Ion batteries are the go-to choice for modern electronics. The technology has been in popular use since the early 1990's and can be found today in laptops, power tools, smart home devices and even on NASA's Mars Rovers.





Containment

These types of batteries have been successfully deployed globally for years and have proven their safety. Rarely, if the battery sustains catastrophic physical damage or microscopic defects occur during the manufacturing process an extremely small percentage can suffer what is called “thermal runaway”. This results in the battery itself causing a brief instance of fire, quickly consuming itself.

To mitigate this there are products that can encapsulate the battery itself. This contains any sudden heat dispersal during failure. This specialized battery container uses the same technology as fireproof document envelopes made for home safes during large structure fires. These can be installed on any mesh node as desired.

