



Blackout Comms uses LoRa, asymmetric encryption, meshing, and digital signatures to securely keep devices in contact.

-  **Meshing:** Messages & location automatically route through best path
-  **Delivery Confirmation:** Signed confirmation is relayed back to sender
-  **Decentralized:** Trusted devices work together to securely deliver
-  **Secure:** Each device along the way validates signature & plans next hop
-  **Anti-jamming:** cluster automatically / unpredictably hops frequencies



Example Private Cluster Shown



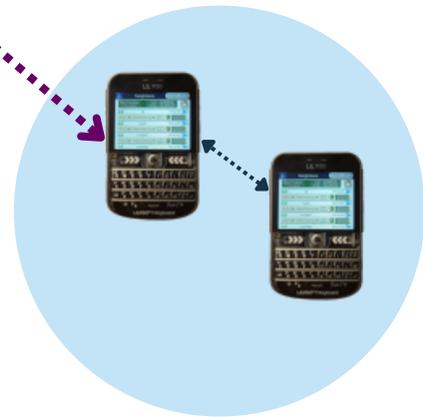
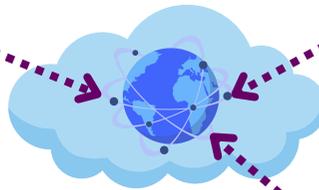
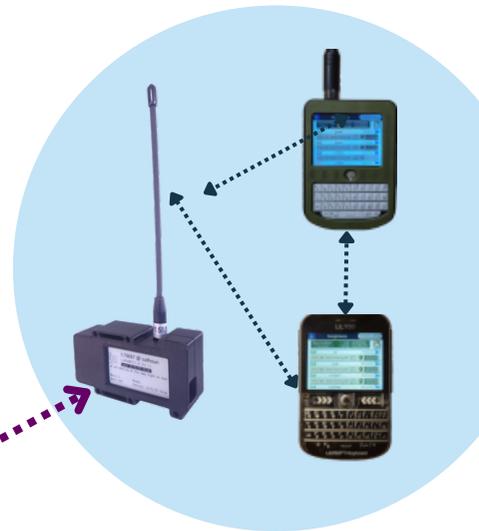
LoRa Hop

Range: 0.5 to 20+ miles, depending on line of sight, amps, other factors



MQTT Hop

Range: Unlimited, depending on internet connectivity



Optionally bridge *any distance* with MQTT

- MQTT allows devices to be connected via WiFi (internet or LAN)
- Any pair of Blackout Comms devices connected via MQTT automatically become a bridge, available to the entire cluster
- Other devices automatically learn to make use of this bridge
- Payloads and location data remain end-to-end encrypted, but TLS is also supported as an additional layer of encryption