

BOSSPAC
TECHNOLOGIES

Dark Network Communications

DARK NETWORK COMMUNICATIONS



A wireless infrastructure with dark network penetration for collecting and distributing infrastructure data from fixed, mobile and quick deploy sensors.

Features:

- Seamless movement of sensing nodes through-out the network.
- MESH Stations with 4-mile LOS range can relay messages to cover gaps in cellular coverage.
- Self-healing MESH Network.
- Stations connected to the internet via an LTE Router or a wired ethernet connection send data to HQ.

MESH Stations:

- 4 miles line of sight range. (Range will be terrain and environment dependent.)
- Cellular connection to the cloud.
- Communications port to interface with external equipment.
- No single point of failure when both DRC MESH and LTE are present.
- Can generate and local broadcast warnings that do not rely on a functioning internet connection.

Moving Equipment MESH Stations:

- MESH Stations can roam seamlessly through-out the network.
- Can receive alerts from HQ or local infrastructure sensors. •Examples:
 - Vehicles
 - Excavating equipment

MOBILE NODES



Mobile End Nodes:

- Mobile Nodes can roam across the entire network.
- Mobile nodes can generate localized subnet messages that do not rely on a functioning internet connection.
- Can be either powered or unpowered.
- Potential battery life of 20+ years
 - Note: Actual battery life will be more strongly dependent on the application nodes data collection power requirements.

Examples:

- Conveyor roller mounted sensors (vibration, temperature, etc.)
- Infrastructure mounted sensors (vibration, proximity, pressure, etc.)
- GPS Asset Tracking
- Status monitoring of sensitive or high value cargo.
- Data bridge to non-wireless data producers.



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