

LoRa BLE Locator

The Ya Batho BLE–LoRa Locator Node is an industrial wireless device designed to detect Bluetooth Low Energy (BLE) tags worn by personnel or attached to assets and forward this information over a long-range LoRa network to surface systems.

It forms a key building block of the Ya Batho Missing Person Locator System (MPLS), providing reliable personnel visibility, last-seen location data, and safety accountability in underground mining environments.

Key Features

- Bluetooth Low Energy (BLE) scanning for personnel and asset tags
- LoRaWAN communication to surface gateways
- Supports OTAA and ABP LoRaWAN provisioning
- Local data buffering for offline operation
- Battery or externally powered operation
- Low-power design suitable for underground use
- Rugged enclosure for industrial environments

Technical Specifications

Parameter	Specification
BLE	Bluetooth 4.2
LoRaWAN	LoRaWAN v1.0.3
BLE Range	Up to 50 m (open space)
LoRa Range	Up to 4 km (open space)
Power Options	Internal rechargeable battery or external supply
Battery Capacity	4200 mAh
Operating Temperature	-20 °C to +60 °C
Enclosure	Industrial-grade ABS

