

# RANGE link



**Improving the safety  
and intelligence of  
your underground  
environment**

- > Precision location and proximity
- > Can be installed on vehicles or at fixed locations
- > Powered via vehicle DC or POE
- > Supports daisy-chaining as a location tag via PoE interface
- > Onboard IMU for vehicle orientation and status

# RANGE link

## MST Global's RANGE Link vehicle and location tags are rugged and DC powered.

Specifically designed for mounting on vehicles, machines, and fixed locations to allow for precision tracking, FMS, chokepoint detection and automation, MST's **RANGE Link** UWB/BLE tags compliment MST's Situational Awareness and Proximity Awareness systems.

The tags draw their power directly from the vehicle's own electrical system or via POE, ensuring the continuous operation of the tag.

When used in conjunction with MST's **AXON Air Series 2** access points, they enable tagged items to be precisely located in real-time, in any mining (open pit to underground) or tunnelling environment.

Tag status and distances are received and processed by MST's **HELIX** enterprise software platform, keeping infrastructure costs low and installation simple. The UWB protocol allows accurate ranging at choke points, between vehicles and other assets.

When used as a vehicle tag, the **RANGE Link** also supports CAN bus communication, and has an onboard IMU for advanced vehicle communication with other vehicle systems. The tags support "reverse" tracking allowing for detection of other nearby tags, including personnel tags, for safety and ranging.

## SPECIFICATIONS

### FEATURES

- > ARM Cortex M33 secure processor, up to 128MHz
- > ARM TrustZone support
- > On board flash for event caching

### UWB RADIO

- > UWB 802.15.4z Ch 5
- > Range: Up to 150m (450 ft)
- > Accuracy: 0.3-0.5m (1-2 feet)
- > Semi-directional antenna for mounting on vehicles

### BLE RADIO

- > BLE 5.3 Supports Eddystone and iBeacon
- > Transmit Power: up to +3 dBm
- > Range: up to 300m using BLEv5 Coded-Phy

### ELECTRICAL

- > 2 x M12 (8 pin X-code) 10/100M PoE+ ports 802.11at allows daisy-chaining of multiple units
- > 1 x M12 (5 pin A-code) vehicle connector for conventional DC input 9 VDC to 36 VDC and CAN interface
- > 1 x M8 (4 pin A-code) USB for configuration

### MECHANICAL AND ENVIRONMENTAL

- > Temperature: -40°C to +80°C (-40°F to +176°F)
- > Ingress Protection: IP67
- > LxWxD: 220x119x46mm
- > Vibration: 8.9G sine sweep; 50G shock

### AGENCY APPROVALS

- > Radio: FCC Part 15 (pending)