

AXON

air series 2



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

- > PoE+ enabled access point
- > Standalone or attachable to an AXON Core
- > Wi-Fi 802.11 a/b/g/n
- > BLE / UWB precision tracking and safety
- > Integrated geolocation capability
- > Can be daisy-chained via PoE interface

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MST's AXON air Series 2 is a versatile Wi-Fi access point designed with power and flexibility in mind. BLE and UWB beaconing have now been added to the AXON air to create the AXON air Series 2. Like the AXON air, the AXON air Series 2 can be daisy-chained via its PoE+ port and the combination of radio and antennas in one package makes installation simple and inexpensive.

AXON air Series 2 features Wi-Fi antenna diversity and integrated support for geolocation. Its advanced feature set enables reliable, high-bandwidth, wireless data and voice coverage throughout the mine or tunnel. The **AXON air Series 2** can act as a Bluetooth beacon, or detect BLE beacons in range. The **AXON air Series 2** also detects and locates MST's RANGE wear and RANGE link UWB tags used by MST's geolocation software to locate these tags and their associated personnel and/or equipment in the mine or tunnel.

Designed to be easily deployed, the **AXON air Series 2** can be mounted directly onto an **AXON core** unit, or independently to a rock surface. The **AXON air Series 2** has two PoE+ ports that allows it to be daisy-chained eliminating the need for external switches or power supplies. This also enables Wi-Fi and BLE coverage to be extended into hard to get to places without the need for fibre – for example, workshops, declines and the last mile – reducing the overall cost of the solution.

The versatility of **AXON air Series 2** continues with its ability to mount high-gain Wi-Fi antennas directly to its enclosure that, with the assistance of an optional swivel mechanism, can be used to help create ad-hoc wireless meshes, working as a wired network gateway or a repeater node.

SPECIFICATIONS

WIRED NETWORK CONNECTIVITY

- > 2 x 1Gbps, PoE+ ports (IP65)
- > Up to 3 units can be daisy-chained 100m apart

WIRELESS CONNECTIVITY

- > 1 x 802.11 a/b/g/n Wi-Fi radio (2x2)
- > 2.4 or 5GHz
- > 6 x SSIDs
- > Meshing 802.11s
- > Transmit Power 20dBm (2.4GHz), 16dBm (5GHz)
- > WEP/WPA/WPA2

NETWORK PROTOCOLS

- > VLAN (IEEE 802.1Q), QoS (P802.1p)
- > LLDP (802.1AB)
- > MST Device Discovery
- > SNMP (read only)

POWER REQUIREMENTS

- > PoE+ Class 4 power requirement, drawing 4W nominally

BLE RADIO

- > BLE 5.3
- > Eddystone and iBeacon
- > TX power up to +3dBm
- > Range: 300m (BLEv5 Coded-Phy)

UWB RADIO

- > 802.15.4z security standard
- > Ch 5 (6.5 GHz) or Ch 9 (8 GHz)
- > Range: Up to 150m (450 ft)
- > Accuracy: 0.3m (1-2 feet)

LED INDICATORS

- > Power, tracking, PoE+, WIFI, BLE, and UWB status LEDs

CONFIGURABILITY

- > Remote firmware upgrade
- > Remote configuration (Web page and file push)
- > Reset button

ENVIRONMENTAL PARAMETERS

- > IP65 rated
- > Operating temperature: 0-50°C
- > Humidity: 95%

COMPLIANCE

- > EMC: CE, FCC, RCM
- > Safety: IEC 62368-1

DIMENSIONS (mm) and WEIGHT

- > 242mm(h) x 135mm(w) x 115mm(d)
- > 1.3kg (without bracket) / 1.8kg (with bracket)