# **AXON**

## Mesh - portable wireless access point

**Brand: MST** 

**Model: AXON Mesh** 



Improving the safety of your underground environment

- Full wireless meshing
- Portable and light weight with multiple mounting options
- Dual hot-swap battery via unique Lachlan ® wheel
- Flexible antenna arrangements
- Intrinsically safe





### mesh - portable wireless access point

MST Global's AXON mesh - portable wireless access point - is an industry leading intrinsically safe, mobile, self-meshing, network extender and access point. Intended for the adhoc extension of a mine or tunnel's existing Wi-Fi network, the AXON mesh is fit for purpose for VoIP, tracking and data transport. The AXON mesh is devised for short to medium term deployment in the dynamic areas of underground mining and tunnelling, including hazardous areas and development sections.

The **AXON mesh** is lightweight, small and portable. It is simple to deploy, delivering connectivity into areas of mines and tunnels where cabling is difficult or dangerous to install and maintain. The AXON mesh is designed to enable multiple nodes in a redundant mesh implementation, effectively filling communication black spots typically found between active mining faces and fixed infrastructure. This enables real-time data collection from personnel and equipment working in these areas, greatly enhancing the safety of underground personnel due to the tracking capabilities enabled by the AXON mesh.

Offering more than 120 hours of battery-powered operation, the intrinsically safe AXON mesh is considerate of the 24-hour reserve required for emergency communications in certain mining laws, such as the US MINER Act. This can be further extended by hot swapping batteries in depleted units to maintain the network and keep the

A turnkey solution, from instrument sampling through to data hand over, the AXON mesh is the perfect solution to extending the IP network of the modern mine or tunnel.

#### **SPECIFICATIONS**

#### WIRELESS CONNECTIVITY

- 1 x IEEE 802.11 b/g/n Wi-Fi radio
- Frequency range: 2400-2483,5 MHz
- Max. Output Power (EIRP): 16 dBm
- Up Link Modulations: CCK, OFDM, BPSK, DQPSK
- 802.11s Meshing

#### **NETWORK PROTOCOLS**

- MST Device Discovery
- SNMP (for remote monitoring)
- TFTP (for central configuration management)
- MST Tracking Protocol
- AeroScout® compatible

#### **POWER**

- 2 x 96 Wh hot swappable Li-ion batteries
- Power input parameters: 7.4V, 150mA
- Typical operational time with fully charged batteries is more than 120 hours (dependent on the environment & the amount of data transmitted)
- Low power consumption

#### CONNECTIVITY

- 1 x N-Type male antenna connector
- 1 x 2dBi Omni-directional antenna
- Decipro antenna kit

#### **STATUS INDICATORS**

Mesh/uplink quality, Wi-Fi access point, Power, Tracking Tag, Fault, Battery

#### **ENVIRONMENTAL PARAMETERS**

- IP67 rated
- Operating temperature:
  - Hard Rock: 0°C to 50°C
  - IECEx: 0°C to 40°C

#### **DIMENSIONS (mm) and WEIGHT**

- 233 x 310 x 92
- 3.45kg (complete with two batteries

Manufacturer: MINE SITE TECHNOLOGIES PTY LIMITED Add: Level 5, 113 Wicks Road North Ryde, NSW, 2113 - Australia Phone: +61 2 9491 6500 www.mstglobal.com

Chile Canada