

AXON control



Improving the safety
of your underground
environment

- > Built for control and automation solutions
- > Ruggedised for harsh underground environments
- > Edge computing with a variety of sensor input options
- > Two relay outputs
- > Seamless integration with the AXON core

AXONⁱ

control

MST's AXON control module offers the most simple and cost-effective way to activate control and automation processes in harsh underground environments. As a plug-and-play edge computing gateway with advanced I/O capabilities, AXON control is designed to enable a range of process optimisation scenarios when connected to the AXON core digital platform.

Unlike full-scale SCADA implementations, **AXON control** can be quickly deployed anywhere in the mine by simply plugging in to an existing AXON core. The control module utilises the AXON core's high bandwidth fibre and PoE+ making it capable of processing large amounts of data simultaneously.

Some examples of **AXON control** applications include:

- > remote water pump control and monitoring
- > ventilation fan control
- > predictive maintenance
- > event reporting
- > traffic and access control
- > emergency stench gas release
- > power monitoring, and more.

AXON control also features inbuilt software with geolocation capabilities meaning scenarios requiring operational logic based on movements and locations of people and vehicles can also be activated.

SPECIFICATIONS

System Connectivity

- > 1 x 1Gbps system interface (IP addressable)
- > General purpose industrial computer

Software Capabilities

- > OS: Linux Yocto
- > Server-side platforms and services: MS Azure, MST HELIX Control & Automation
- > Protocol: MQTT

Environmental Parameters

- > IP65 rated
- > Operating temperature: 0-50°C

Sensor Inputs

- > 2 x 4..20mA analogue inputs
- > 2 x 0..10V analogue inputs (can be configured as digital inputs 12/24 VDC)

Regulated Power Outputs

- > 12 and 24 Volt DC, used to power external sensors

Relay Outputs

- > 2 x DPDT relay outputs (rated 2A at 30VDC)

LED Indicators

- > Power and system status LED
- > Sensor power LEDs
- > Relay closed LEDs