



Mining

Autonomous vehicles in mining operations can boost productivity 15-20%, according to research trials. Cohda delivers industry-leading connectivity solutions for the mining industry, improving safety and productivity in challenging environments.

Our proximity detection and collision avoidance systems have been developed specifically for mining applications. We can achieve accuracy of <1m 95% of the time, enabling vehicles to operate autonomously in GNSS-denied locations. Using the building blocks of V2X-Locate technology and map matching for underground tunnels, Cohda enables seamless positioning and V2X applications in pits, above ground and below ground.

Mining Solutions

Mining Applications

Cohda's proven suite of 'Day One' applications are the first choice for the mining industry, bringing standards compliance and automotive economies of scale to this rapidly evolving sector.

Cohda Wireless mining solutions include:

- V2V collision avoidance
- V2P proximity detection
- V2I asset tracking

All have been proven to work in tunnels and large cavities, creating safer and more productive mines.

MK5 XBU

Built specifically for mining operations, our MK5 XBU can be deployed as an On-Board Unit (OBU) or as fixed infrastructure as a Road-Side Unit (RSU). It is also available as a reference design for mining equipment developers.

The MK5 XBU is based on our MK5 OBU and RSU products, ruggedised for the harsh conditions of underground mining operations. Its communication range is outstanding, and it can determine its location precisely, even deep underground.

To improve safety as well as productivity, the MK5 XBU can provide ranging to people via personnel tags, and it can be remotely configured to minimise the need for on-site personnel.

V2X-Radar

The reliance on sensors for the future of mining is critical, however current sensors solutions offer line of site issues and can under perform in rain, snow and fog, directly hampering a CAV's ability to adequately identify and assess dangerous situations.

Cohda's V2X-Radar transforms a V2X system into a 360 degree radar system with no additional hardware.

Using multiple known points (other equipped vehicles or RSU's) V2X-Radar can distinguish between static and dynamic objects and identify their position. V2X-Radar not only helps CAV's identify and assess dangerous situations but it can also be used in plausibility checking and to enhance positioning of CAV's.