

MOVING DETECTION

## Mining safety kit for working in dangerous environments

To reduce the risk of accidents and equipment damage in quarries, mines, and construction sites, VIA is showcasing the VIA Mobile360 AI Mining Safety Kit at the Conexpo-CON/AGG. Dynamic moving object detection is realized via CAN.



*The kit comes with an unified interface supporting customized alerts and visual data displays (Source: VIA Technologies)*

The kit enables operators of cranes, excavators, trucks, and other heavy equipment to work safely in the most dangerous environments. It keeps operators aware of everything that is happening around their vehicle, while eliminating blind spots and potential collision points. At the heart of the kit is a ruggedized VIA Mobile360 M820 in-vehicle safety system. Built to excel in the harshest environments, the system boosts operator situational awareness by offering a live 360-degree video stream of the vehicle's exterior. Safety can be further enhanced with its support for blind spot detection, front collision detection, and short range radar and ultrasonic proximity sensors.

As mentioned, the mining kit enhances operator situational awareness in harsh and dangerous environments with its support of advanced camera AI (artificial intelligence), ultrasonic proximity sensor, and mmWave short distance radar sensor technologies. Using smart sensor fusion, the kit can be configured to run demanding visual intelligence and obstacle detection applications for a range of vehicles and equipment. Its key features include a real-time 360° video of the surrounding environment using four FOV-190° Gen-Lock cameras and VIA Mobile360 SVS technology. Additionally it uses dynamic moving object detection using rear FOV-190° camera and a CAN network.

Blind spot detection and front collision detection using up to three FOV-40° automotive-grade cameras and VIA Mobile360 ADAS technology are also supported. The kit also comes with an ultrasonic proximity sensor and mmWave short distance radar sensor using the company's Mobile360 Sense technology. The product is a fanless in-vehicle system, supporting ADAS. It comes with IP65-rated cable glands, IP69K-rated cameras, heat sinking, internal and external vibration pads, as well as IP67-rated 10,1-inch industrial-grade LCD displays.

"With its leading-edge vision and short-range radar sensor technologies, the VIA Mobile360 AI Mining Safety Kit makes it safer and easier for drivers to operate heavy machinery and equipment in the world's harshest terrains," said Richard Brown, VP International Marketing, VIA Technologies. "Flexible camera and short range sensor fusion technologies mean that the kit can be optimized for the most demanding applications and a full range of day and night-time conditions."

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