

GroundProbe®

Part of  **ORICA** Monitor



OUR SLOPE

STABILITY RADAR SUITE

groundprobe.com

decision confidence™

TACTICAL,
TARGETED

SSR-XT

The SSR-XT critically monitors known movements or high-risk areas that pose a potential or immediate threat to the safety or productivity of mining operations.



RADAR TYPE	3D - Real Aperture Radar (3D-RAR)
SAFETY CRITICAL	
MONITORING AREA	
RANGE	
SPECIFICATIONS	Range: 3500 Metres End-to-End Scan Time: 30° x 15° (2 Minutes), 180° x 60° (26 Minutes) Visualisations: Front View and DTM View Temperature Ranges: -40°C to +60°C

FEATURES

- The industry's most reputable, most proven system
- In-built processing ensures no latencies or delays in the transfer of data, enabling fast response times
- Fully-processed data immediately available for viewing and alarming
- at the end of every scan, crucial for safety-critical monitoring
- Real-time photographs co-registered with the radar data, with the deformation heatmap draped over the high resolution image



FAST,
BROAD-AREA

SSR-FX

The SSR-FX monitors broad areas for long periods of time to detect new risks, hazards, hotspots of movement and provide geotechnical peace of mind.

RADAR TYPE	2D - Real Aperture Radar (2D-RAR)
SAFETY CRITICAL	
MONITORING AREA	
RANGE	
SPECIFICATIONS	Range: 3500 Metres End-to-End Scan Time: 210° x 60° (2 Minutes) Visualisations: Plan View and DTM View Temperature Ranges: -40°C to +60°C

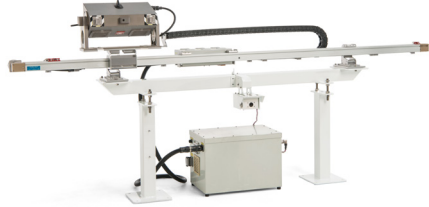
FEATURES

- Monitors a 7km wide pit in an instant through its 210° scan area capabilities
- Generates fine azimuth angles and small range pixels, delivering real aperture radar measurements
- Stunning pixel resolution of 1.4 million pixels per scan
- High speed scanning with an end-to-end scan time of less than two minutes
- Fully-processed data immediately available for analysis after every scan

LONG-RANGE,
HIGH-RESOLUTION

SSR-SARx

The SSR-SARx scans from long range with high resolution, aiming to pick up small movements that occur over many months.



RADAR TYPE	2D - Synthetic Aperture Radar (SAR)
SAFETY CRITICAL	
MONITORING AREA	
RANGE	
SPECIFICATIONS	Range: 4500 Metres End-to-End Scan Time: 60° x 60° (2 Minutes Maximum) Visualisations: Plan View and DTM View Temperature Ranges: -40°C to +60°C

FEATURES

- Stunning aperture resolution with pixels of 0.083 degrees by 75 centimetres
- Detects movement with 50 per cent more resolution than competing SAR systems
- Even at 4.5km away, maintains the highest resolution qualities with
- a sub-bench pixel size
- 40 second acquisition time and in-built processing results in a two minute end-to-end scan time
- Intelligent processing algorithms reduce the size of the raw SAR data files by 96.5%



FULL-COVERAGE,
HIGH-RESOLUTION

SSR-Omni

The SSR-Omni scans a complete 360° revolution around itself from long range in high resolution, aiming to detect and distinguish hotspots of movement.

RADAR TYPE	2D - Real Aperture Radar (2D-RAR)
SAFETY CRITICAL	
MONITORING AREA	
RANGE	
SPECIFICATIONS	Range: 5600 Metres End-to-End Scan Time: 360° x 60° (2 Minutes) Visualisations: Plan View and DTM View Temperature Ranges: -25°C to +55°C

FEATURES

- A range of up to 5.6km with 11.2km coverage in-pit
- The sharpest of definition modes; selectable between 0.08, 0.24 and 0.33 degree pixels, each at 0.1 millimetre accuracy
- Sweeps 360° in 40 seconds to acquire raw data and processing
- occurs at the radar in real time
- On-board imaging system is 40 megapixels in resolution and captures a 180° panoramic view with 21 levels of zoom
- Remote inspection with dual-feed, live video streaming and forensic zoom

TACTICAL,
HIGHLY-MOBILE

SSR-Agilis

The SSR-Agilis is a highly-mobile, self-functioning system designed to protect personnel and equipment working in to active areas of open-cut mines.



RADAR TYPE	3D - Real Aperture Radar (RAR)
SAFETY CRITICAL	
MONITORING AREA	
RANGE	
SPECIFICATIONS	Range: 1400 Metres End-to-End Scan Time: 85° x 20° (2.5 Minutes Maximum) Visualisations: DTM View Temperature Ranges: -40°C to +40°C

FEATURES

- Fully customizable scan area that operates to 270° in azimuth and 100° in elevation, with a range of up to 1,400m away
- Standalone monitoring system requiring no Wi-Fi, site communications or mine power
- On-board rechargeable battery
- pack of up to 24 hours of backup power
- Armed with four in-built visual and audible personal warning functionality
- In-built processing ensures no latencies or delays in the transfer of data, for fast response times

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