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STABILITY RADAR SUITE

OUR

decision confidence[™]



SSR-XT

When managing a known hazard or high-risk areas, a targeted monitoring strategy is required. The SSR-XT critically monitors known movements that pose a potential or immediate threat to the safety or productivity of mining operations.



SSR-FX

When detecting new risks and hazards across vast areas, broad-area monitoring is required. The SSR-FX monitors broad areas for long periods of time to detect hotspots of movement and provide geotechnical peace of mind.

LONG-RANGE, **HIGH RESOLUTION**

SSR-SARx

For large mine sites where other radar technologies simply cannot scan walls out to 4.5km, a long-range solution is required. The SSR-SARx scans from long range with the highest resolution, aiming to pick up small movements that occur over many months.

FULL-COVERAGE, **HIGH-RESOLUTION**

SSR-Omni

Designed to detect hotspots of movement in an ultra-fast, all-encompassing scan, the SSR-Omni covers the broadest of areas with the highest resolution. Completing a 360° scan every 40 seconds, all new risks and deformation hotspots are detected quickly so that users can act on them fast.



GroundPr@be



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	
HOW IT SCANS	Generates a small spot on the wall that is rotated left-to-right and up-and-down - like a spatiality to completely cover the high-rick area	

RADAR TYPE	2D - Real Aperture Radar (2D-RAR)	FEA
SAFETY CRITICAL	_	• Mo
MONITORING AREA	•	• Ge
RANGE		sm an
SPECIFICATIONS	Range: 2800 Metres End-to-End Scan Time: 180° x 60° (2 Minutes) Visualisations: Plan View and DTM View Temperature Ranges: -40°C to +60°C	• Stu
HOW IT SCANS	Generates a thin vertical strip that quickly sweeps around the whole scene like a fan - left to right - scanning vast areas in minutes.	

RADAR TYPE	2D - Synthetic Aperture Radar (SAR)		FEATUR
SAFETY CRITICAL		•	Stunning
MONITORING AREA		-	by 75 cer
RANGE	6	•	Detects r
	Range: 4500 Metres End-to-End Scan Time: 60° x 60°	-	systems
SPECIFICATIONS	(2 Minutes Maximum) Visualisations: Plan View and DTM View Temperature Ranges: -40°C to +60°C	•	Even at 4 highest r
HOW IT SCANS	Illuminates the wall, forming high resolution targets, coupled with a longer integration time.		Sub bein

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	٠
HOW IT SCANS	It monitors 360° through a thin vertical stripe that quickly sweeps around the walls of the mine site.	

- nerates fine azimuth angles and all range pixels, delivering real erture radar measurements
 - Inning pixel resolution L.4 million pixels per scan

TURES

- e industry's most reputable, most oven system
- built processing ensures no encies or delays in the transfer of ta, enabling fast response times
- ly-processed data immediately ailable for viewing and alarming the end of every scan, crucial for ety-critical monitoring
- Real-time photographs co-registered with the radar data, with the deformation heatmap draped over the high resolution image

TURES

- nitors a 5.6km wide pit in an instant ough its 180° scan area capabilities
- 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

ATURES

- Stunning aperture resolution with ixels of 0.083 degrees y 75 centimetres
- etects movement with 50 per cent nore resolution than competing SAR
- ven at 4.5km away, maintains the ighest resolution qualities with a ub-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%

TURES

- ange of up to 5.6km with 11.2km verage in-pit
- ovides unique, real aperture easurements that are less sceptible to contamination
- uipped with the sharpest of finition modes; selectable between 08, 0.24 and 0.33 degree pixels, each 0.1 millimetre accuracy
- Sweeps 360° in just 40 seconds to acquire its raw data and processing occurs at the radar in real time
- On-board imaging system is 40 megapixels in resolution and captures a full 180° panoramic view
- Users can conduct remote, real-time inspections, 180 degrees at a time

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