

MSR

REUTECH

MINING

Movement and Surveying Radar

All weather, day and night...



Smarter, Smaller, Superior

The MSR 300 system, with its 1.2m dish antenna, is the only slope radar system that is capable of resolving a 15m bench failure at its full operating distance of 2500m. Other slope radar systems with bigger antennas "can resolve a 15m bench failure at 1700m". The same technology is incorporated in the MSR 200

with a maximum operating distance of 1200m. This feature is unique to the MSR product range and proves that size does not matter when advanced technology is incorporated.

In other words: *smarter = smaller = superior.*

- Designed to operate reliably in harsh mining environments.
- Provides highly accurate, real-time, all weather surveying and slope movement measurements using state-of-the-art radar and surveying technology.
- Measurements are fully geo-referenced to an accuracy that allows seamless integration with standard Digital Terrain Mapping (DTM) tools.
- The simultaneous execution of stability and surveying measurements, combined with the high-speed external data links for remote operation, and extremely high reliability, makes the MSR range of products an essential real-time mining safety, planning and productivity improvement tool.

...Safety and productivity through accuracy and reliability...

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Features

- Operating range:
 - ▶ **MSR 300:** up to 2500m
 - ▶ **MSR 200:** up to 1200m
- Integrated Leica Geosystems™ total station
- Full remote operation (24/7)
- High-speed wireless communication
- Lockable with tamper-indication alarms
- Fully self sustained operation
- Comprehensive Built-In Test (BIT) functionality (remote monitor of all system parameters)
- Simultaneous stability and surveying measurements
- Integration of DTM
- Integrated weather station and advanced algorithms to reject the effects of atmospheric variations
- Rapid deployment (<30 minutes)
- Integral power supply system
- Low maintenance
- Highest operation availability on the market.

Environmental Conditions

- Operating temperature
 - ▶ Basic unit: -10°C to +55°C
 - ▶ With optional low temperature kit: -30°C to +55°C
- Extreme dust
- Wind: < 100 km/h
- Rain: < 60 mm/h
- Low maintenance

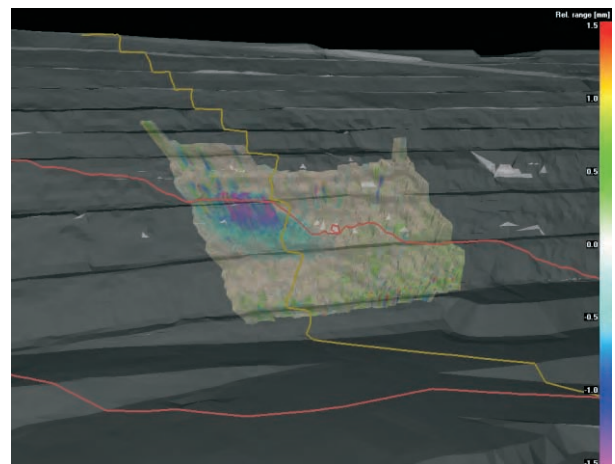
Slope stability features

- Real time detection of sub-millimetric slope movements
- Geographically referenced slope movements

- Advanced dual user-defined alarm generation software to cater for all types of mining operations
- Selectable scan speeds
- User configurable high threat areas and exclusion zones
- Recording and playback functionality

Surveying features

- Surveying distance measurement < 100mm (absolute range)
- Geographically referenced surveying information
- Complex algorithms to resolve absolute frame of reference
- Advanced synthetic map generation
- Functionality to capture position of object identified, for example:
 - ▶ Geological structures
 - ▶ Types of material
- Survey data can be imported into standard surveying products



Synthetic map showing slope movement and imported DTM with geotechnical structures



FCC approved.



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Reutech reserves the right to amend the characteristics of its products at any time.

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