

MSR 300

REUTECH
MINING

Movement and Surveying Radar



- 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 300 an essential real-time mining safety, planning and productivity improvement tool.

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

MSR 300

Movement and Surveying Radar



Features

- Operating range: 50m to 2500m
- 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 all measurements with DTM
- Integrated weather station and advanced algorithms to reject the effects of atmospheric variations
- Transmit power < 1 Watt
- Rapid deployment (<30 minutes)
- Integral power supply system
- Transport trailer conforms to national road regulations

Environmental Conditions

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

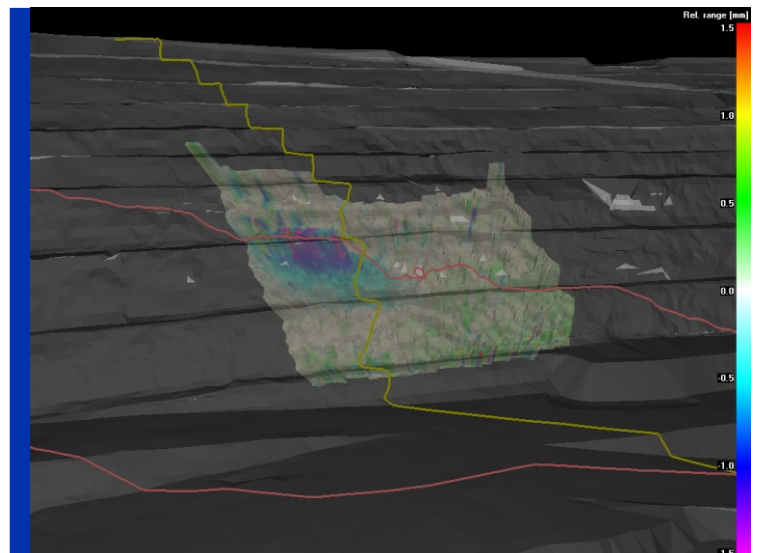
Slope stability features

- Real time detection of sub-millimetric slope movements (> 0.2mm)
- Scan to scan displacement detection of 200mm
- Geographically referenced slope movements
- Advanced 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:
 - Fault lines
 - Slip planes
 - Types of material
- Survey data can be imported into standard surveying products



Synthetic map showing slope movement and imported DTM with geotechnical structures

