







Designed to critically monitor known movements that pose a potential or immediate threat to the safety or productivity of mining operations, the SSR-XT monitors slope movements within a targeted area.

A 3D Real Aperture Radar, its fine pencil beam scans in a raster pattern to provide full 3D imaging, guaranteeing every targeted area of concern is monitored in real-time.

MAKING MINING SAFER



Features and Benefits

HIGHLY PRECISE, TARGETED MONITORING

For known high-risk areas, a targeted monitoring strategy is needed. SSR-XT does this best by generating a small spot on the wall that is rotated left-to-right and up-and-down – like a spotlight – to completely cover the high-risk area.

Because each spot points directly to a physical spot on the wall, the confidence in precisely measuring wall movements is at its highest.

MOST REPUTABLE, MOST PROVEN SYSTEM

As the first Slope Stability Radar ever developed, the SSR-XT has now been in active service for almost two decades, having undergone numerous improvements over that time.

Currently in its third series, it's the industry's most reputable, most proven system.

IN-BUILT PROCESSING FOR A FASTER RESPONSE TIME

The SSR-XT's scan area is fully customisable, allowing users to precisely target the points of interest they want to monitor.

In-built processing at the radar ensures no latencies or delays in the transfer of data to the Primary Monitoring Point, enabling a fast response time, crucial for safetycritical monitoring. The fully-processed data is immediately available for viewing and alarming at the end of every scan; a feature specifically unique to GroundProbe.

GEOMETRY-INDEPENDENT 3D MODEL GENERATION

Not reliant on a broad beam to illuminate the wall, the SSR-XT's pencil beam is able to be positioned anywhere, to image any area, independent of the geometry.

The radar automatically generates a powerful, high-density 3D model of the wall. It is updated live, scan by scan, to produce its own, always up-to-date 3D model that doesn't rely on any external source.

The 3D model can be manoeuvred to better understand the geological shape, structures and locations of potential failures that can never be derived from a historical CAD model.

HIGHLY MOBILE, FAST AND FLEXIBLE DEPLOYMENT

The SSR-XT is highly mobile, with the capacity to scan from anywhere in your pit – guaranteeing every targeted area of concern is monitored in real time.

Equipped with an in-built electric jack kit, the SSR-XT can be safely deployed by one user quickly and with minimal physical exertion or risk. Flexible to site-specific needs, the system is also available in a fixed deployment model and as a medium-dish solution, the SSR-MT.

ROBUST, RUGGED AND RELIABLE IN ALL CONDITIONS

The SSR-XT is extremely durable; proven to reliably operate in inhospitable environments that have included intense sun, rain, wind, snow and humidity.

Mechanically sound and delivering reliable data, the SSR-XT can be deployed at mine sites that range in temperatures from -40°C to +55°C, and sit as high as 5000m above sea level.

DATA AND IMAGE CO-REGISTRATION

The SSR-XT includes a high resolution, integrated imaging system for real-time photographs that are co-registered with the radar data; a technique unique to and patented by GroundProbe.

When the data is visualised, the deformation heatmap is draped over the high-resolution image. By clicking on any part of the image, movement can be reviewed and assessed live, with confidence.

MONITORIQ COMPATIBLE

The SSR-XT is fully compatible with GroundProbe's patented data analysis and aggregation software, MonitorIQ; offering the rapid, precise analysis of data to detect trends and the ability to send alerts for immediate action.

MonitorIQ also allows users to visualise SSR-XT and other geotechnical sensor data in a standardised format to run analysis, discover trends and generate powerful reports.

decision confidence[™]