IDS GeoRadar

IBIS-Rover

Rapid deployment radar system for critical monitoring



Mobile medium-range radar for broad area slope monitoring

PART OF HEXAGON

IDS GeoRadar: Innovative Interferometric Radar for Mining, Environmental and Civil Engineering Applications

www.idsgeoradar.com

IBIS-Rover

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IBIS-Rover is the only Synthetic Aperture Radar with an antenna rotating capability developed and designed to provide highly accurate real-time measurements of mine wall movements and early warning of impending failures.

IBIS-Rover benefits from IDS GeoRadar's industry leading expertise in SAR technology for mining applications to provide an agile, broad area coverage, state-of-the-art radar system for quick deployment and fast scan time.

With a spatial resolution of 1.6 million pixels per scan, IBIS-Rover can resolve the full scale of slope instabilities from sub-bench to broad wall movements.

IBIS-Rover's unique features make it ideal for tactical positioning, long-wall open cut operations (e.g. coal strip mining) or wherever frequent relocation is required in multiple-pit operations.

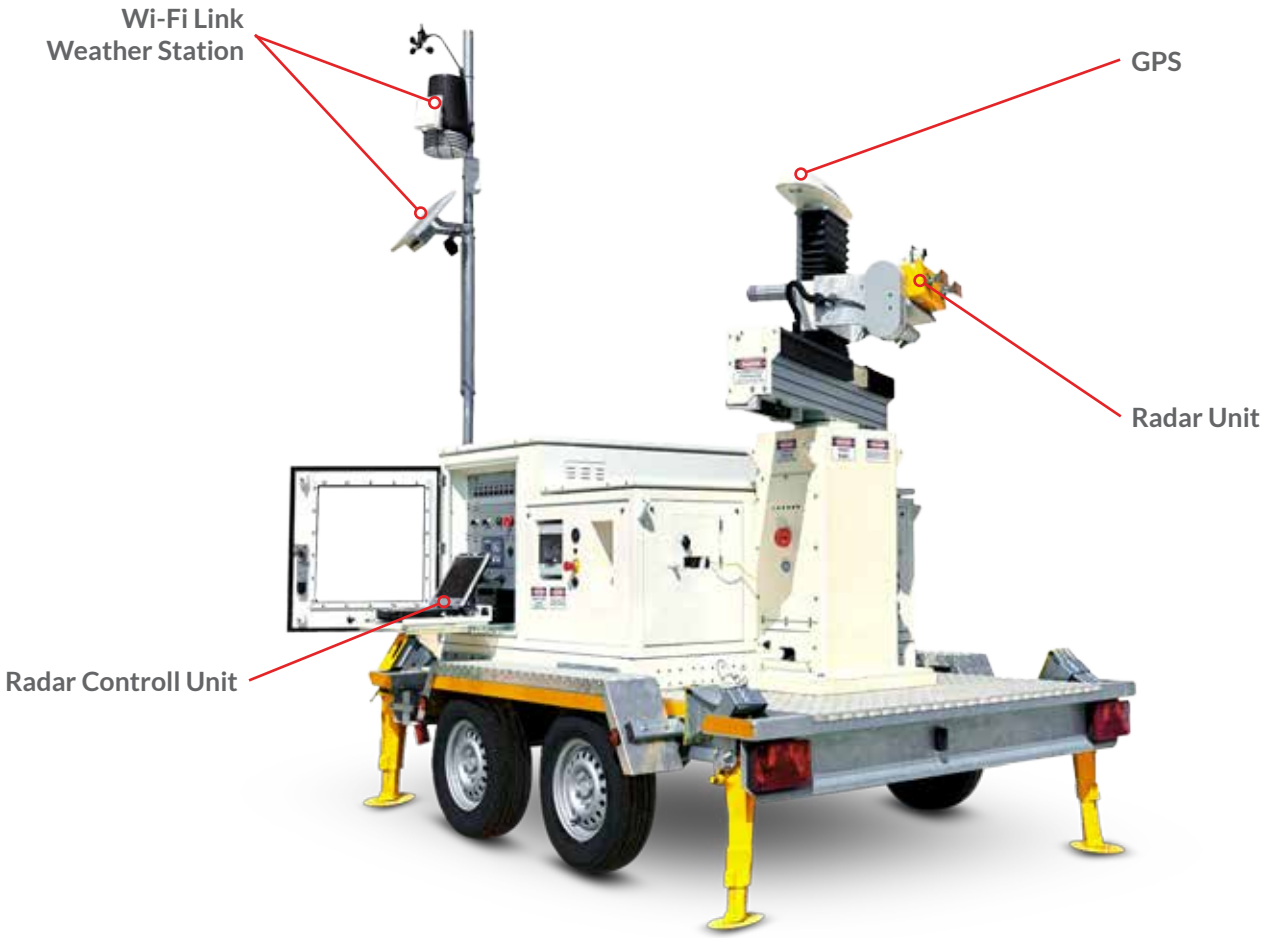


IBIS-Rover features high mobility and easy setup

APPLICATIONS	BENEFITS
Safety critical monitoring	One technology for tactical and strategic monitoring with full-scale coverage in time and space
Short and medium-range monitoring with frequent relocation and maximized coverage	270° maximum field of view to ensure flexibility of coverage in all mining scenarios, even at short range, with a scan time of just 4 minutes
Focus on critical areas	Fully integrated trailer solution and one-touch project set-up for quick deployment in critical areas
Tailings dam and waste dump monitoring	Built-in GPS for automatic geocoding of radar data. No survey required, and easy and immediate data integration with third-party software platforms
Long-wall open cast operations	Multiple built-in power sources to run autonomously for at least 15 days (genset, solar, wind turbine, battery backup). No external power trailers required
Multiple-pit operations	The most advanced automatic atmospheric correction, able to react to sudden changes of atmosphere. No stable areas required and data available from the second scan
Early detection of slow movements in support of mine planning and geotechnical analysis	Common hardware components and critical parts shared among all IBIS radars, providing cost savings and quick troubleshooting
Pits with complex geometry	Integration with the FPM360 full pit monitoring network

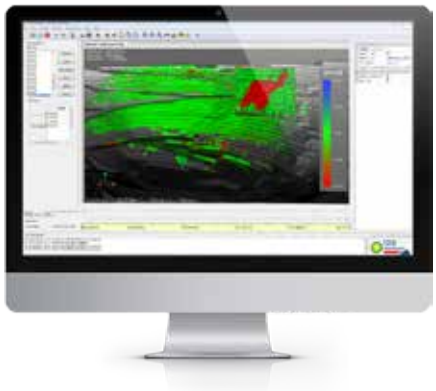
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MODULAR COMPOSITION



IBIS-ROVER FEATURES

- Scan ranges between 50 and 2500m
- Fast scan time: 1 min for 90° coverage, 4 minutes for full 270° coverage
- Fully remote operation (wireless radio link) and optimized file size for low bandwidth
- Operates in all weather conditions and temperatures (-20/-50°C* to 55°C)
- Solid double-axle trailer with hydraulic jacks
- Alarm generation with user-defined levels and multiple alarm criteria
- Zero delays in data processing and alarm generation, providing a seamless workflow for immediate user reaction
- Exportability of output to mine planning software
- Built-in geotechnical analysis tools
- Automatic generation of 3D models (DTM) of the scanned area



IBIS Guardian software highlighting areas of displacement

* with low-temperature kit

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