

IBIS-Rover

Rapid deployment radar system for critical monitoring

IDS Ingegneria Dei Sistemi S.p.A.
GeoRadar Division, Via Enrica Calabresi 24, 56121 Pisa (PI) Italy
Tel. +39 050 31241 Fax +39 050 3124201
georadarsales@idscorporation.com

IDS Brasil Engenharia de Sistemas Ltda.
Av. Paulista, 2300L, Andar Pilotis,
CEP 01310-300 São Paulo – SP / Brasil
Tel. +55 11 3060 9364 Fax +55 11 3060 9364
idsbr@idscorporation.com

IDS Brasil Engenharia de Sistemas Ltda. Belo Horizonte
Av. Prof. Mario Werneck, 26
Conjto 503 Belo Horizonte - MG, Brazil, CEP 30455-610
Tel. +55 31 3286 1195 Fax +55 31 3286 1195
idsbr@idscorporation.com

IDS North America Ltd.
155 Terence Matthews Cres. Ottawa, Ontario K2M 2A8 Canada
Tel. +1 613 591-0500 Fax +1 613 591-0981
idsna@idscorporation.com

IDSNA, Inc.
14828 W 6th Ave., Suite 12-B, Golden, CO 80401, USA
Phone: + 1 303 232 3047 Fax: + 1 720 519 1087
idsna@idscorporation.com

IDS Australasia Pty Ltd.
Unit 5, 3-5 Hinkler Court, Brendale, Queensland, Australia, 4500
Tel. +61 7 3205 5524 Fax 61 7 3205 5536
idsau@idscorporation.com

IDS Australasia Pty Ltd, Perth
Unit 8, 3 La Fayette Boulevard, Bibra Lake, Western Australia, Australia 6163
Tel: +61 8 9418 8719 Fax: +61 7 320 55536
idsau@idscorporation.com



MOBILE MEDIUM-RANGE RADAR FOR BROAD AREA SLOPE MONITORING

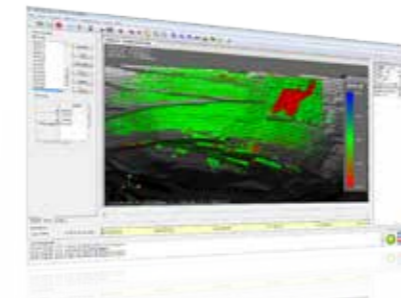
IBIS-Rover

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'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 Guardian software highlighting areas of displacement



APPLICATIONS



Safety critical monitoring



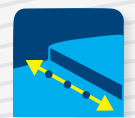
Short and medium-range monitoring with frequent relocation and maximized coverage



Focus on critical areas



Tailings dam and waste dump monitoring



Long-wall open cast operations



Multiple-pit operations



Early detection of slow movements in support of mine planning and geotechnical analysis



Pits with complex geometry

BENEFITS



One technology for tactical and strategic monitoring with full-scale coverage in time and space



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



Fully integrated trailer solution and one-touch project set-up for quick deployment in critical areas



Built-in GPS for automatic geocoding of radar data. No survey required, and easy and immediate data integration with third-party software platforms



Multiple built-in power sources to run autonomously for at least 15 days (genset, solar, battery backup). No external power trailers required



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



Common hardware components and critical parts shared among all IBIS radars, providing cost savings and quick troubleshooting



Integration with the FPM360 full pit monitoring network

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 (-10/-35°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

* with low-temperature kit



IBIS-Rover features high mobility and easy setup