



Next generation long-range radar for slope and structural monitoring

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

[www.idsgeoradar.com](http://www.idsgeoradar.com)

## RELY ON A TRUE SET-AND-FORGET SYSTEM

IBIS-FM EVO represents the state of the art of slope monitoring radar for semi-permanent safety-critical monitoring. With a maximum scan range of up to 5km, IBIS-FM EVO is designed to measure sub-millimeter displacements in real time with the highest data quality, able to measure multiple scales of displacements, from fast accelerations associated with the risk of collapse to early detection of very slow movements.

## A GROUND-BREAKING MONITORING METHOD FOR UNPRECEDENTED DATA QUALITY

IBIS-FM EVO is equipped with our most powerful radar sensor, combined with the unique free-running acquisition technique. Further improves the quality of the acquired data for better informed decisions.  
**\*Patent pending**

## MAXIMISE PRODUCTIVITY

Dual-antenna GNSS compass enables to auto georeference the system speeding up pre-monitoring phase. Minimise interruptions and improve cost efficiency during your monitoring program with the new auto diagnostic features such as the embedded inclinometer, providing stability warning feature, and real-time webcam for remote troubleshooting

## AN INNOVATIVE SCAN FEATURE

The reduced scan time of up to 30 seconds, now four times faster than before, and the new bidirectional scan, significantly reduce the impact of atmospheric variations and make it possible to track even faster slope movements than before. The innovative bidirectional scan also improves system durability and reduces wear and power consumption over time.

## LOW POWER CONSUMPTION AND HIGHER RELIABILITY

IBIS-FM EVO has enhanced the already durable and trusted design of its predecessor, the IBIS-FM, to further improve operational availability and power consumption (reduced by up to 25%), confirming its position as the most dependable, durable semi-permanent radar on the market.

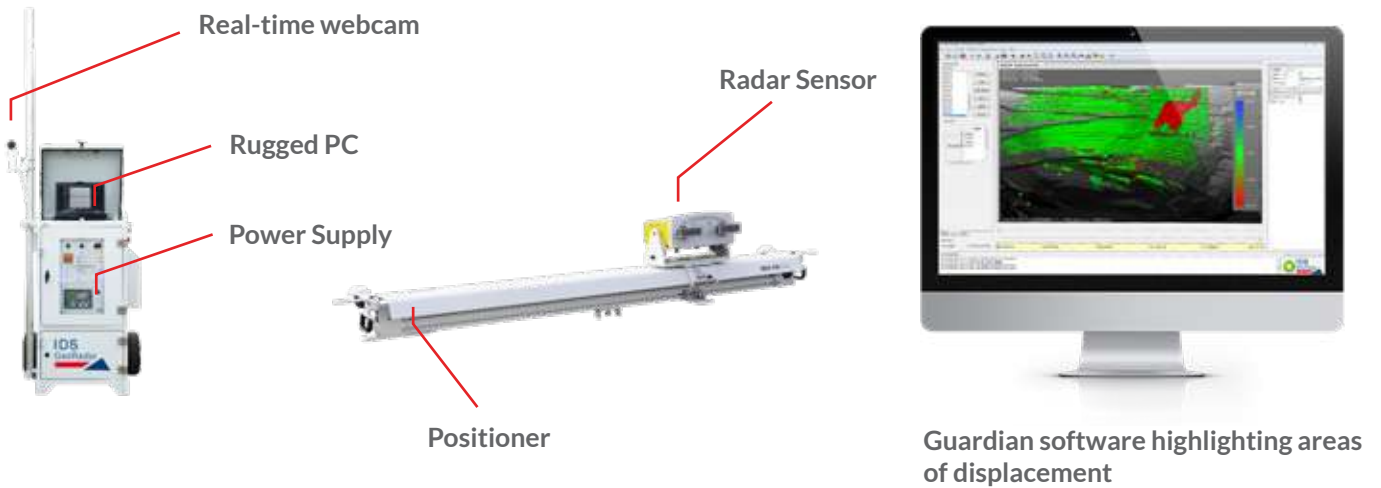
## STANDARD, SHORT & LONG VERSION

IBIS-FM EVO, besides standard version, is available in a Short and Long version for a wider range of applications and tailored benefits.

**IBIS-FM EVO Short** with an increased transportability and compact design is ideal for short/medium range monitoring. **IBIS-FM EVO Long** with a 3.2m scan length, offers a better spatial resolution and is ideal for long range monitoring.

APPLICATIONS	BENEFITS
 Safety critical monitoring (rapid displacements)	 The most advanced automatic atmospheric correction, able to react to sudden changes of atmosphere. No stable areas are required and data are available from the second scan
 Early detection of slow movements in support of mine planning operations and geotechnical analysis	 One technology for tactical and strategic monitoring with full-scale coverage in time and space
 Long-term continuous monitoring	 Data immediately available
 Long-range and broad area coverage (5000 m)	 Set-and-forget semi-permanent installation (indoor/outdoor)
	 Proven high in-service availability: limited number of moving parts and low maintenance requirements (minimum downtime)

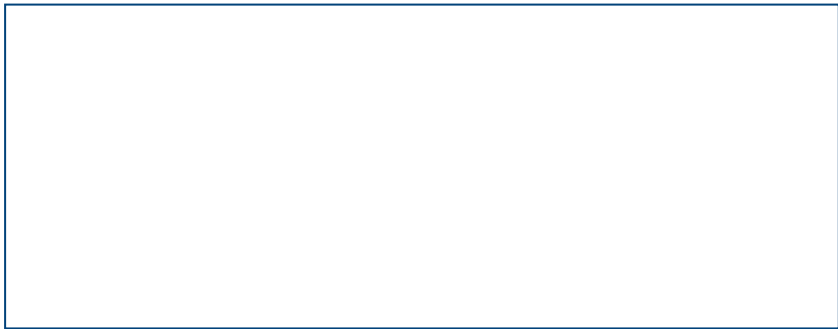
**IBIS-FM EVO CONFIGURATION**



SYSTEM SPECIFICATIONS		SOFTWARE SPECIFICATIONS	
SPATIAL RESOLUTION*	@1 km SHORT: 0.375 m x 9.7 m STANDARD: 0.375 m x 4.3 m LONG: 0.375 m x 2.7 m	GUARDIAN	<ul style="list-style-type: none"> <li>User friendly intuitive interface</li> <li>Real-time automatic processing</li> <li>Automatic advanced atmospheric corrections</li> <li>Alarm generation with user-defined levels, zones and multiple alarm criteria</li> <li>Long datasets for geotechnical back analysis</li> <li>Fully geo-referenced interactive data handling</li> <li>Import of multiple digital layers for displaying geological information</li> <li>Exportability of output to mine planning software and data is available from the second scan</li> </ul>
ACCURACY	up to 0.1 mm (Line of Sight displacement)		
OPERATING RANGE*	50 m to 5.000 m		
SCAN TIME	SHORT: Min. 20 seconds STANDARD: Min. 30 seconds LONG: Min. 45 seconds		
POWER CONSUMPTION	75-90W depending on acquisition time interval		
ENVIRONMENTAL	Rain and dust resistant		
CERTIFICATION	CE, FCC, IC		

\*Please refer to Data Sheet for detailed technical specs.





**IDS GeoRadar Srl**  
Via A. Righi 6, 6A, 8-56121 Pisa (PI) Italy  
Tel. +39 050 89 34 100 Fax +39 050 3124 205  
[www.idsgeoradar.com](http://www.idsgeoradar.com)  
[info@idsgeoradar.com](mailto:info@idsgeoradar.com)