

## **IBIS-FM EVO**

The next generation of ground-based radar monitoring system



Next generation long-range radarfor slope and structural monitoring



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



### **IBIS-FM EVO**

### **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 autogeoreference 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.

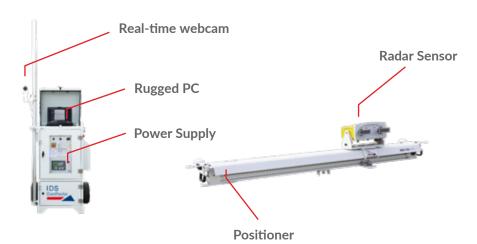
low maintenance requirements (minimum downtime)

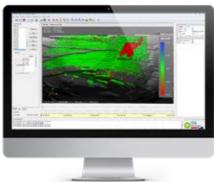
APPLICATIONS	BENEFITS		
Safety critical monitoring (rapid displacements)	The most advanced automatic atmospheric correction, able to react to sudden changes of atmosphere. No stable areas are required and data are available from the second scan		
Early detection of slow movements in support of mine planning 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		



# **IBIS-FM EVO**

### **IBIS-FM EVO CONFIGURATION**





Guardian software highlighting areas of displacement

SYSTEM SPECIFICATIONS		SOFTWARE SPECIFICATIONS			
SPATIAL RESOLUTION*	<b>@1 km SHORT:</b> 0.375 m x 9.7 m <b>STANDARD:</b> 0.375 m x 4.3 m <b>LONG:</b> 0.375 m x 2.7 m		<ul><li> User friendly intuitive interface</li><li> Real-time automatic processing</li></ul>		
ACCURACY	up to 0.1 mm (Line of Sight displacement)		Automatic advanced atmospheric corrections		
OPERATING RANGE*	50 m to 5.000 m	GUARDIAN	<ul> <li>Alarm generation with user-defined levels, zones and multiple alarm criteria</li> <li>Long datasets for geotechnical back analysis</li> </ul>		
SCAN TIME	SHORT: Min. 20 seconds STANDARD: Min. 30 seconds LONG: Min. 45 seconds		<ul><li>Fully geo-referenced interactive data handling</li><li>Import of multiple digital layers for displaying</li></ul>		
POWER CONSUMPTION	75-90W depending on acquisition time interval		<ul> <li>Exportability of output to mine planning softwareand data is available from the second scan</li> </ul>		
ENVIRONMENTAL	Rain and dust resistant				
CERTIFICATION	CE, FCC, IC				

<sup>\*</sup>Please refer to Data Sheet for detailed technical specs.







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