

# **IBIS-FM EVO**

The next generation of ground-based radar monitoring system



Next generation long-range radar for open-pit slope monitoring



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

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 **OUALITY**

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

The design of the IBIS-FM EVO is optimized to minimize maintenance even in the harshest conditions of open pit mines. Remote trouble shooting is made easier with a dedicated, integrated live-streaming camera, which is particularly useful for installations where physical access to the system is difficult.

## **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.

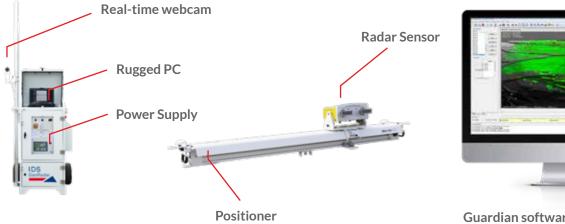
low maintenance requirements (minimum downtime)

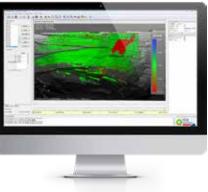




**IBIS-FM EVO** 

# **IBIS-FM EVO CONFIGURATION**





Guardian software highlighting areas of displacement

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       • Alarm generation with user-defined levels, zones and multiple alarm criteria         • Long datasets for geotechnical back analysis         • Fully geo-referenced interactive data handling         • Import of multiple digital layers for displaying geological information	<ul><li>Real-time automatic processing</li><li>Automatic advanced atmospheric corrections</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		<ul> <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 softwareand data is available from the second</li> </ul>
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. +39 050 098 9300 Fax +39 050 3124 205 www.idsgeoradar.com info@idsgeoradar.com

