

HELLOMAC GEO

Unlock the Future of Rockfall Protection





Since 2020, Maccaferri has **embarked on a journey** towards embracing **IoT technologies**. We initiated this path by developing **the first HELLOMAC**, a pioneering project designed to enhance our rockfall protection systems by making them smart.

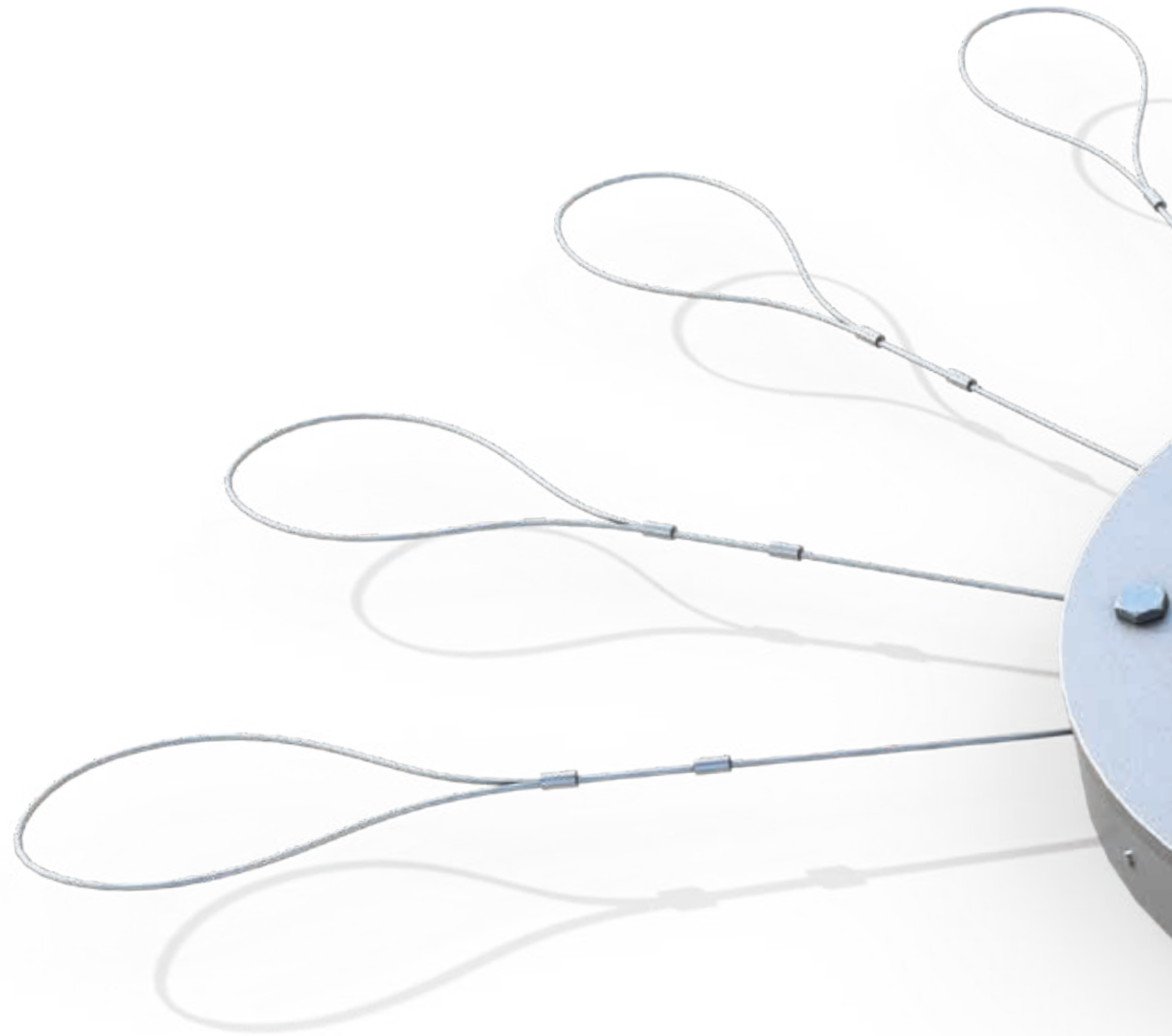
This innovation led to the creation of a comprehensive protection system equipped with early warning capabilities, **setting a new standard in environmental safety** and technological integration in our industry.

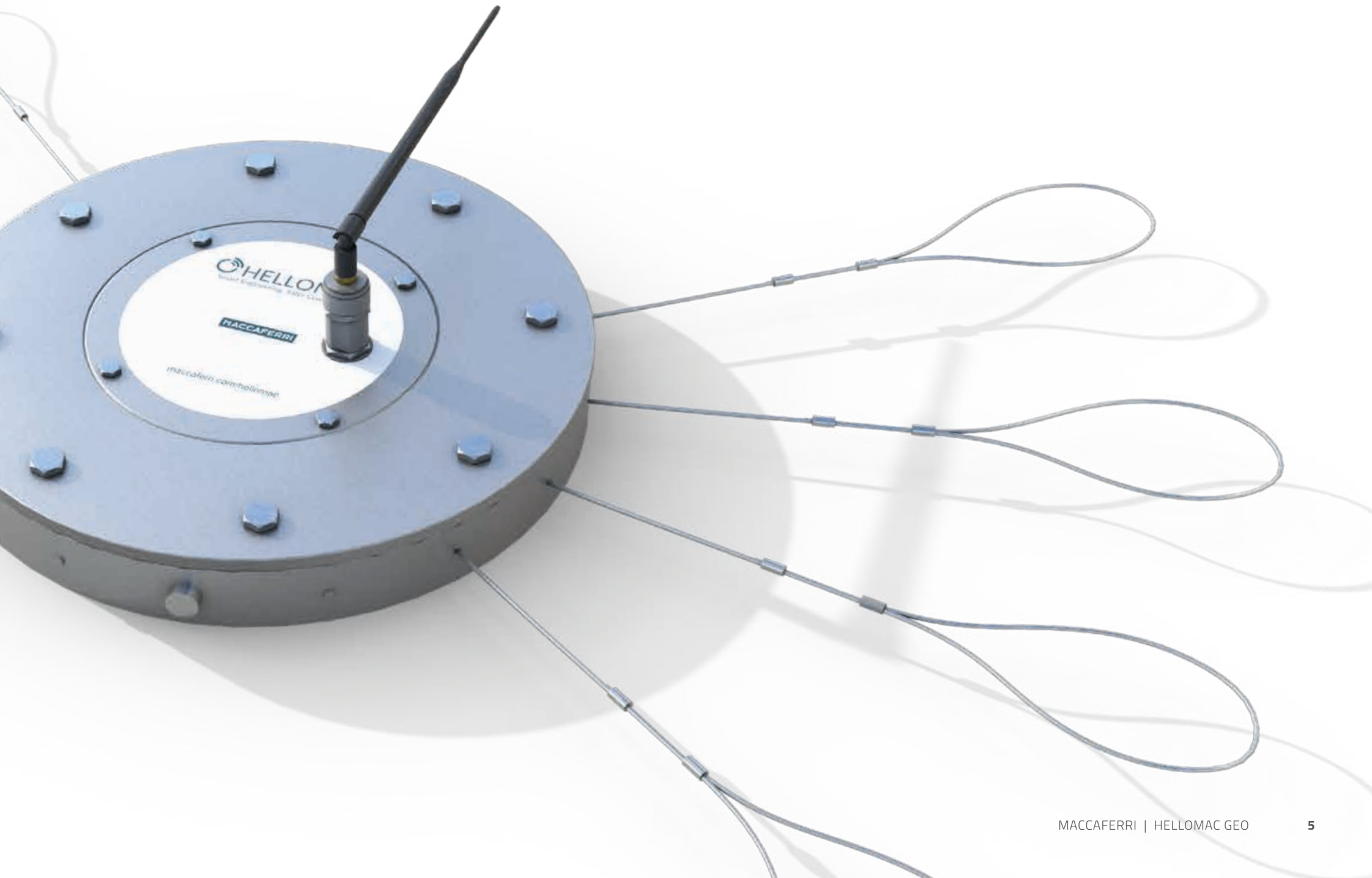
**We have firmly believed in this project
from the start, and now we're ready to do more**



All our solutions are designed to enhance safety and efficiency in civil engineering. By integrating **smart early warning systems**, we can elevate these solutions to new levels of intelligence and effectiveness, contributing to empower communities and their well-being.

At the heart of our vision for HELLOMAC lies a commitment to **pioneering smart innovations** that elevate safety **across diverse applications**. Within this framework, **HELLOMAC Geo** emerges as a comprehensive suite of solutions meticulously designed for the intricate demands of **rockfall protection**.





Smart Engineering

3 minutes

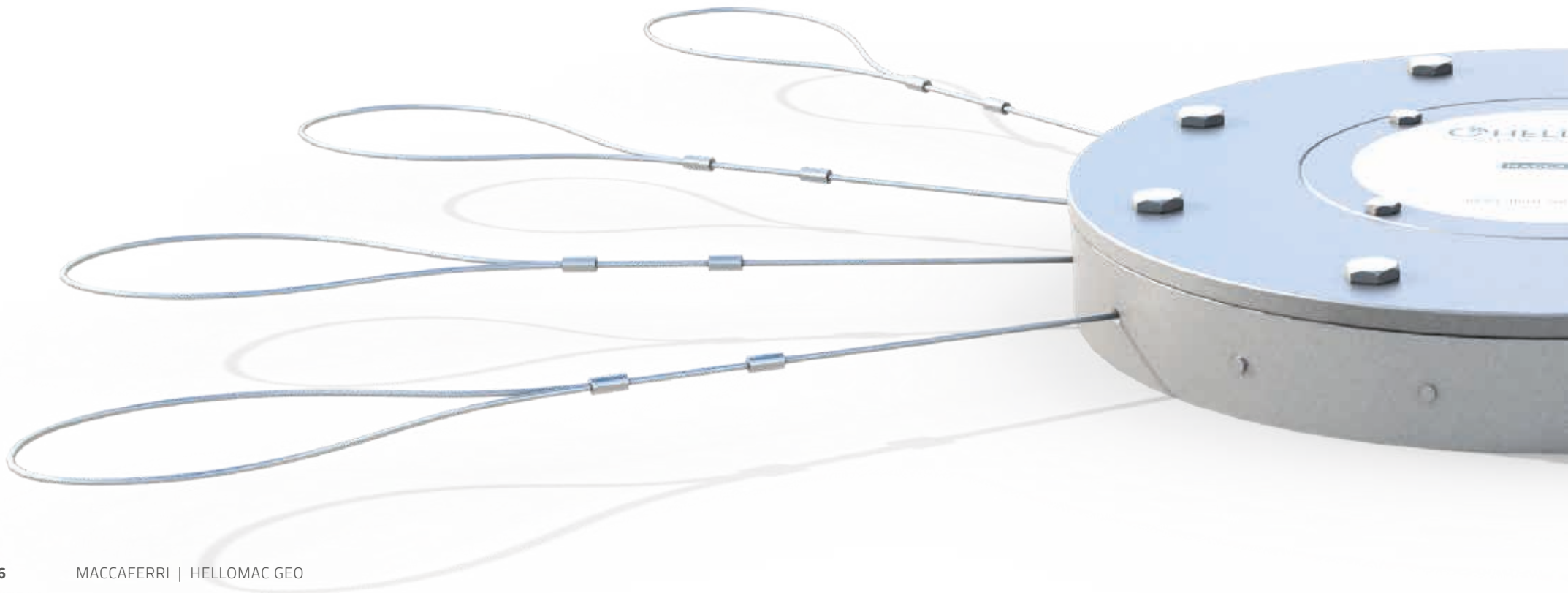
It takes no more
to receive the alert

8 kg

So light and small, that
it installs easily anywhere

5 years

Long-lasting battery,
no need for maintenance

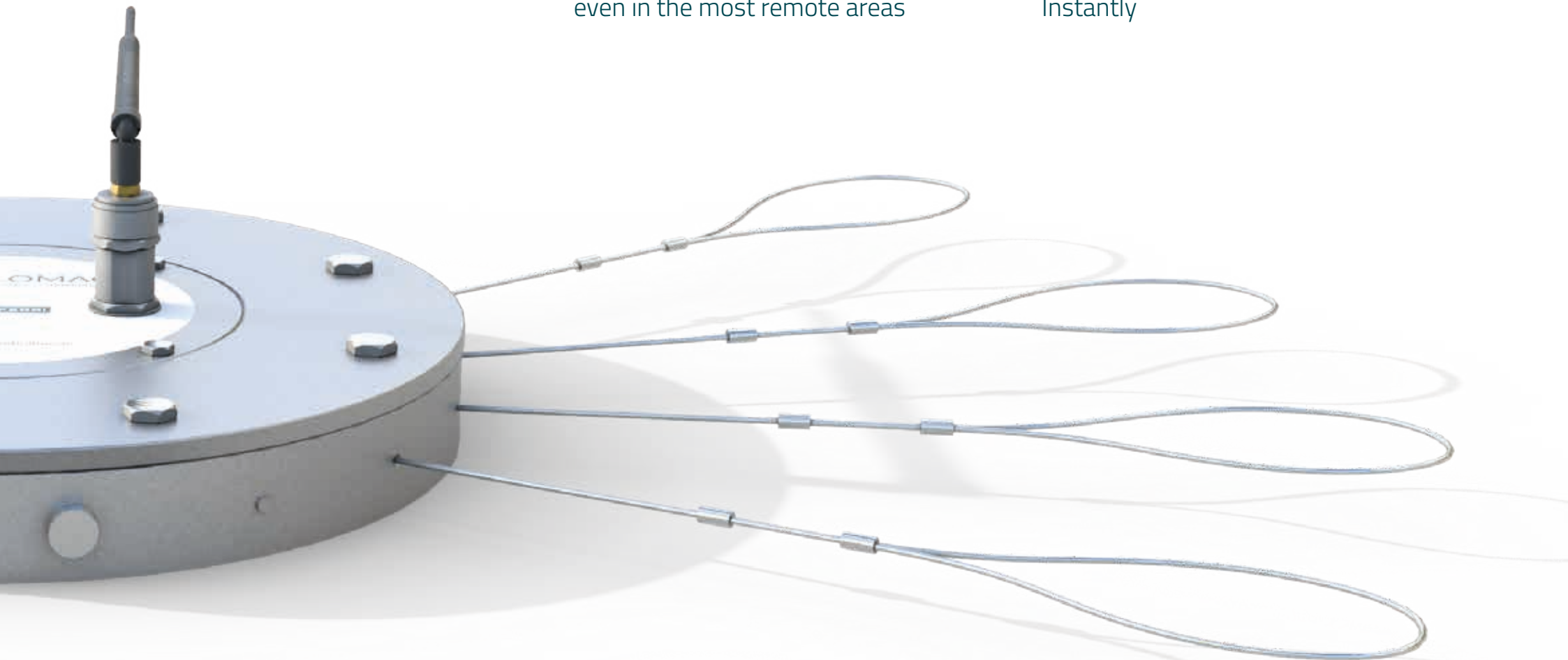


4G, Satellite, GSM

Never without network coverage,
even in the most remote areas

App, SMS, Email

Get alerts your way
Instantly



Safer Communities

SMART DRAPERY SYSTEMS

Drapery systems are meticulously engineered to serve as essential defenses against rockfall hazards, providing crucial protection for infrastructure by effectively containing falling debris on precarious slopes.

Now, with **HELLOMAC Geo's intelligent monitoring**, our entire range of solutions, including Maccaferri DT Mesh, MacArmour, Steelgrid HR System, and HEA Panels, gains **real-time threat detection capabilities**.

HELLOMAC Geo streamlines setup effortlessly, offering a 5-year battery life and dependable network coverage. This **significantly reduces risks and costs associated with onsite activities**, while also guaranteeing uninterrupted monitoring and timely alerts for **enhanced safety**.





**SECURING A VITAL ROUTE
IN THE PICTURESQUE ALPS**

 **Roccasecca dei Volsci, Italy**

The project in central Italy enhances safety and stability with SteelGrid mesh and HELLOMAC Geo IoT monitoring, protecting residential areas and vital infrastructure from rockfalls.

Safer Communities

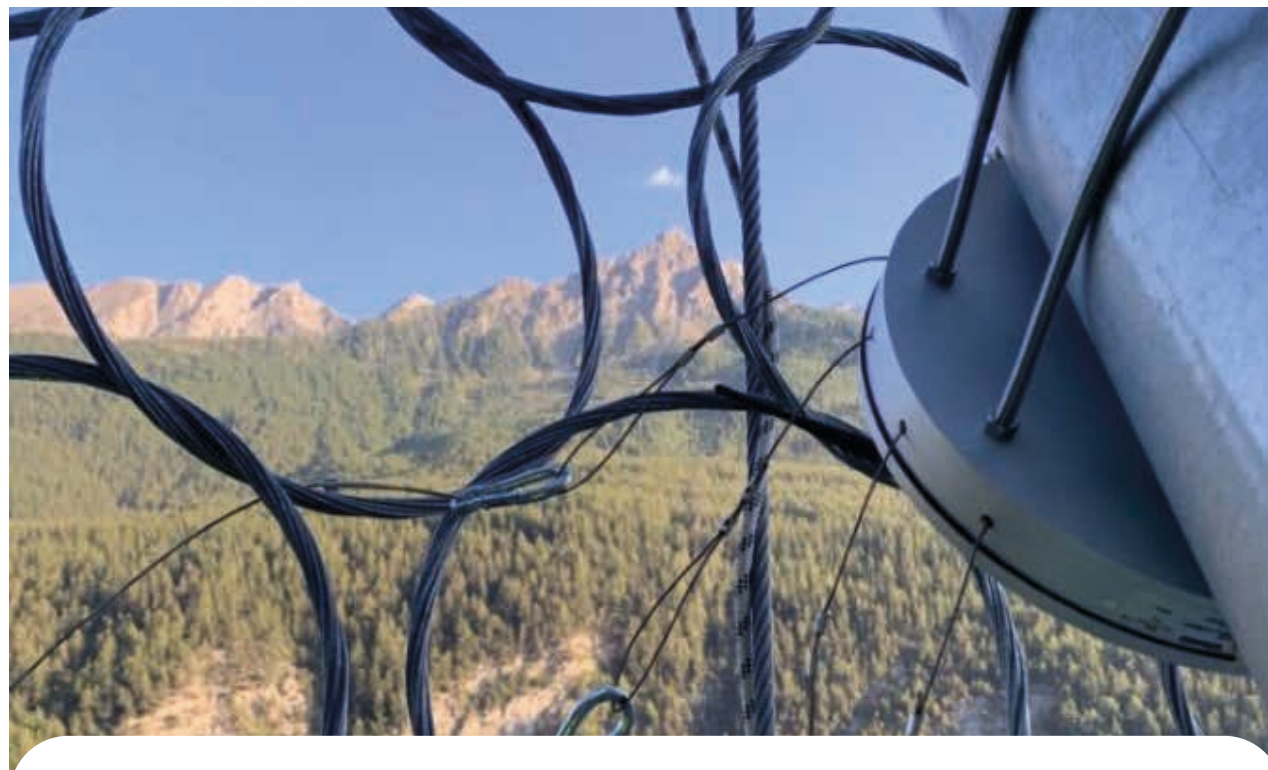
SMART BARRIER SYSTEMS

Rockfall and debris flow barriers are essential safeguards against nature's unpredictability, standing resilient against boulders and landslides.

With HELLOMAC Geo, these barriers become smart systems and they gain comprehensive monitoring capabilities. With eight sensors meticulously positioned and supported by eight legs, HELLOMAC Geo covers every panel of the barrier, instantly **detecting impacts and triggering real-time alerts**.

A robust construction enables it to withstand harsh conditions, ensuring reliable performance **even in the most remote locations**. Moreover, its ability to cover both GSM and satellite networks guarantees uninterrupted connectivity, crucial for remote monitoring. This comprehensive coverage, combined with HELLOMAC Geo's other features, makes it a **cornerstone of safety** for lives and infrastructure.





SECURING THE FRANCE-ITALY ALPINE CONNECTION

 La Rochaille, France

In the scenic Ubaye Valley, France, dynamic barriers and HELLOMAC Geo enhance road safety on RD 900. Visit our page and watch the dedicated video to learn more about this project!



Safer Communities

RETROFITTING

Enhancing existing structures to improve their performance is crucial for ensuring the effectiveness of rockfall protection measures.

Retrofitting, whether it's reinforcing existing **barriers, catch fences, or drapery systems**, is essential for adapting infrastructure to meet evolving safety standards. In this process, integrating monitoring solutions is paramount, and **HELLOMAC Geo stands out as the smart alert system ideal for retrofitting applications**.

Its ease of installation and adaptability to various rockfall protections minimize disruptions and costs. Moreover, HELLOMAC Geo's capability to integrate with other sensors, even those already installed, enables comprehensive monitoring, even in systems not initially designed for such capabilities.





PROTECTING CANNOBIO'S ROADS AND COMMUNITIES

 Cannobio, Italy

In northern Italy, the SS34 road, protected by rockfall and debris flow barriers, was retrofitted with 34 HELLOMAC Geo units to ensure real-time monitoring against geological hazards.

Safer Communities

GEOSTABILITY MONITORING

Geostability monitoring is essential for assessing and managing the risks associated with precarious slopes.

HELLOMAC Geo stands out as the ultimate monitoring solution, allowing for the **integration of various sensors** such as extensometers, inclinometers, and piezometers into a single data collection system.

This innovative approach not only simplifies the monitoring process but also enhances its accuracy and responsiveness.

With HELLOMAC Geo, you gain **real-time alerts** and **comprehensive monitoring** capabilities, ensuring that every shift and change in the landscape is detected and addressed promptly, providing **complete control with only one data collection point**.





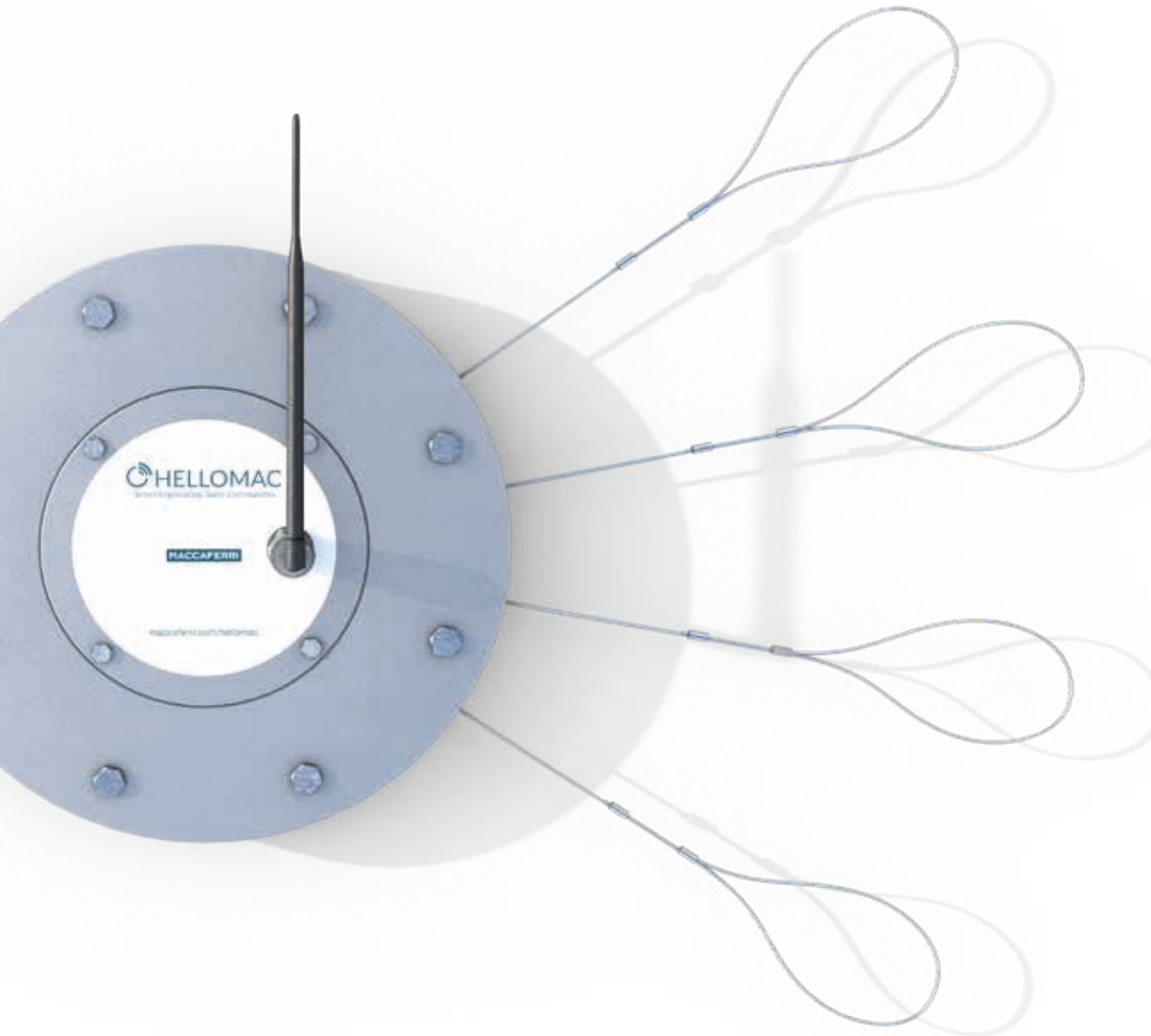
**COMPREHENSIVE MONITORING
SYSTEM FOR DEBRIS FLOW**

 Ono San Pietro, Italy

In the Alpine region, a critical 3.5-kilometer stretch of Torrente Blè was equipped with 4 HELLOMAC Geo units, ensuring real-time monitoring and proactive protection.

Elevate your monitoring, make it Plus

Combine your HELLOMAC Geo with the Kit Plus that you need.



LOCAL ALERT KIT

Automatically activate traffic lights, signals, sirens, and gates in case of an event.



ROCK DISPLACEMENT CONTROL KIT

Measure millimetric displacements to track wall and rock movements.



SLOPE DISPLACEMENT CONTROL KIT

Precisely monitor landslides, slopes, and large, slow-moving masses.



CLIMA CONTROL KIT

Measure rainfall, temperature, and air humidity. Perfect for comprehensive environmental monitoring.



GROUNDWATER LEVEL CONTROL KIT

Track groundwater level variations due to deep landslides. Measure water head variations in cm or mm.



STABILITY CONTROL KIT

Monitor deep mass movements and slip surfaces. Measure angular displacement of masses.



WIND CONTROL KIT

Precisely measure wind direction and speed, ideal for environmental and safety applications.

Real-time insights at your fingertips

Forget everything else. Monitor it all from one screen.



DON'T BUY EXTRA DATA LOGGERS. ONE IS ALL YOU NEED

Choose your kit, and it will arrive ready to integrate with your HELLOMAC data logger

COMPLETE CONTROL, ALL IN ONE APP

Monitor both your HELLOMAC Geo and Kit Plus with our App



CUT THE CORDS. GO FULLY WIRELESS!

A fully wireless system connecting your HELLOMAC Geo, your data logger and as many Kit Plus as you want

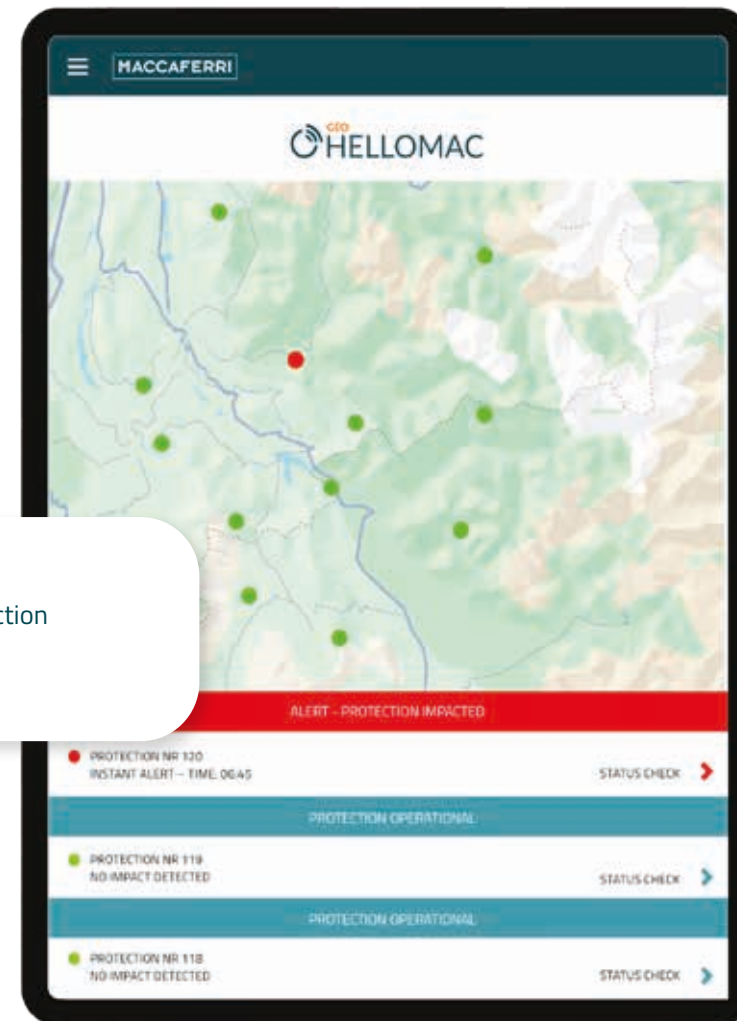
Always in the know with the HELLOMAC app.



CHECK THE MAP!

All our sensors are geolocated. Monitor your rockfall protection and sensors anytime, anywhere.

Download the HELLOMAC App
on the App Store and on Google Play



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MACCAFERRI

Engineering a Better Solution

Maccaferri's motto is 'Engineering a Better Solution'; We do not merely supply products, but work in partnership with our clients, offering technical expertise to deliver versatile, cost effective and environmentally sound solutions. We aim to build mutually beneficial relationships with clients through the quality of our service and solutions.

GLOBAL ENGINEERS

In the second half of the 19th century, we invented Gabions and dramatically changed the civil engineering landscape. We are still changing today. We work every day to find better solutions for our clients at every degree of latitude and longitude. Our worldwide network grows through innovation and diversification of sectors of activity and through an increasing range of high quality and environmentally friendly products and applications.

OFFICINE MACCAFERRI GROUP PROFILE

Founded in 1879, our Group soon became a worldwide reference in the design and development of advanced solutions, with offices in over 70 countries and 30 factories worldwide.

Our mission is to pursue excellence through continuous improvement, while delivering to customers engineered solutions that are innovative, advanced and environmentally friendly. We are committed to outstanding safety, quality and sustainability, to create value for all stakeholders as well as our communities.

MACCAFERRI APPLICATIONS

 RETAINING WALLS
& SOIL REINFORCEMENT

 SOIL STABILISATION
& PAVEMENTS

 DRAINAGE OF STRUCTURES

 FENCING & WIRE

 HYDRAULIC WORKS

 BASAL REINFORCEMENT

 TUNNELLING*

 AQUACULTURE NETS/CAGES

 ROCKFALL PROTECTION
& SNOW BARRIERS

 COASTAL PROTECTION,
MARINE STRUCTURES & PIPELINE
PROTECTION

 LANDSCAPE & ARCHITECTURE

 CONCRETE FLOORING,
PRECAST & OTHER USES*

 EROSION CONTROL

 ENVIRONMENT, DEWATERING
& LANDFILLS

 SAFETY & NOISE BARRIERS

 INDUSTRIAL
MANUFACTURING

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