GIATEC

SmartRock™

Wireless Concrete Sensor for Temperature and Strength Monitoring

> "With real-time data, SmartRock leaves everything in my control and I don't need to rely on third parties."

April Smith
Field Coordinator, PCL Construction

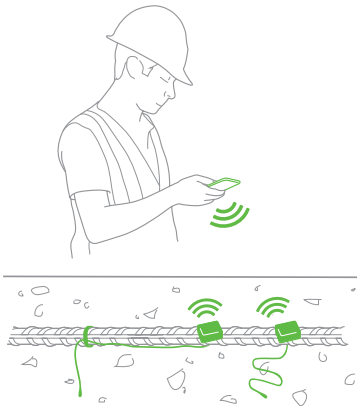**Wire-Free & Wireless Technology**

Remote Monitoring Capabilities

Easy Activation & Installation

Real-Time Data Collection

SmartRock™

Wireless Concrete Sensor for Temperature and Strength Monitoring

SmartRock

Conventional Methods

Overview

SmartRock is the world's leading wireless sensor for monitoring the curing and hardening of concrete. The sensor is fully-embedded and secured on the rebar, making it completely maintenance and hassle-free. Temperature data is collected at two locations in the sensors' cable and body. The strength of your in-place concrete is then calculated automatically based on the maturity method (ASTM C1074). These results are accessible in real-time and remotely through the SmartRock mobile app and on the Giatec 360™ cloud dashboard to help you make informed decisions. SmartRock's AI assistant, Roxi™, eliminates human-error by sending smart notifications and alerts to give you the upmost confidence in your mix calibration data and accuracy of strength test results.
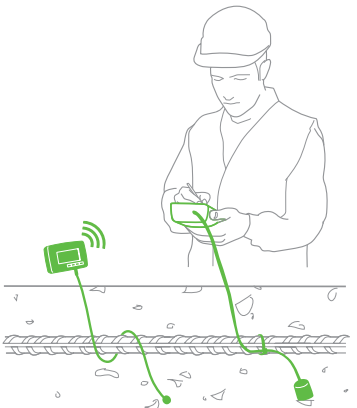
Features

Software

- Accurate real-time data display (i.e. temperature, strength, max-min values, and graphs)
- Maturity calibration database
- Free Android/iOS app with easy-to-use guide
- Project management tools including live data sharing
- Giatec 360 web-based cloud dashboard
- Proactive AI notifications of concrete pouring time and mix calibration errors
- Full PDF & CSV reporting and data exporting
- Open API integration with project management applications (i.e. Procore)

Hardware

- Wire-free and wireless technology
- Fast, simple, and hassle-free activation and installation
- Extended temperature cable and probe for mass concrete
- Two points of temperature measurements located in sensor cable and body
- Rugged and waterproof design
- Long battery life
- 24/7 remote monitoring capabilities with the SmartHub™ device

Applications

- Measure temperature differentials
- Accelerate formwork removal
- Control quality in the field
- Speed up post-tensioning
- Open roads to traffic faster
- Optimize curing conditions
- Improve saw cutting time

Technical Specifications

Reading Range
–22 to +181 °F (–30 to 85 °C)

Measurement Accuracy
± 1.8 °F (± 1°C)

Measurement Resolution
± 0.18 °F (± 0.1°C)

Measurement Frequency
Once every 15 mins
(for 2 months of data)

Wireless Signal Range
Up to 40 ft (12 m)

Temperature Cable Length
12 in (30 cm) / 10 ft (3 m)

Battery Life
Up to 4 months after installation

Data Communication and Analysis
Free Android and iOS app
Giatec 360 Cloud Dashboard

Standards
ASTM C1074 (Approved by ACI 318, CSA A23.1, most USDOT specifications)

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