



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

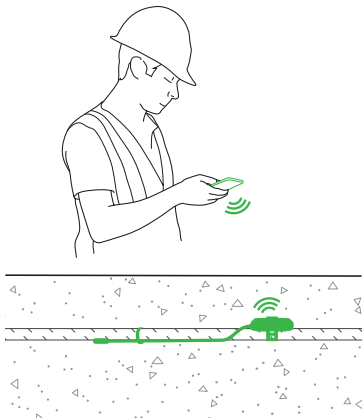


Easy
Activation &
Installation

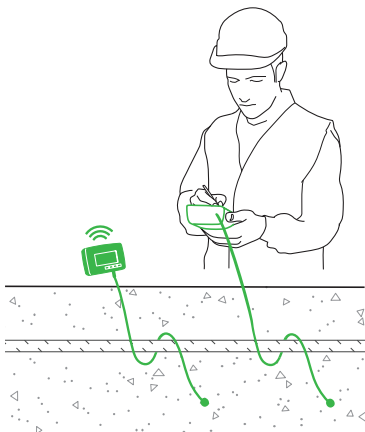


Real-Time
Data
Collection

SmartRock



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
- Temperature differential analysis
- 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 and 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) /
By request: 50 ft (15.2 m)

Battery Life

Up to 4 months after
installation

Data Communication and Analysis

Free Android & iOS app
Giatec 360 Cloud
Dashboard

Standards

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