# GIATEC

# **SmartRock**<sup>™</sup>

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 TEMPERATURE °C

Cable

Sensor #1

63.2° Max Reached Min. Reached 72.0° 54.0° Mox. Limit 70.0°

Min. Limit 12.0°



e



75%

1

Specified

36.0



Wire-Free & Wireless Technology



Remote Monitoring Capabilities



Easy Activation & Installation



Data Collection



#### Wireless Concrete Sensor for Temperature and Strength Monitoring





#### **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<sup>™</sup> cloud dashboard to help you make informed decisions. SmartRock's AI assistant, Roxi<sup>™</sup>, eliminates humanerror 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<sup>™</sup> 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)