

SmartRock[™]

Wireless Concrete Sensor for Temperature and Strength Monitoring

SmartRock reduced our labor costs by 85%. It only took me 30 minutes to install 10 sensors.

Frank Hoffman, Superintendent, Graham Construction ⑧ TEMPERATURE °C

Cable

1:01

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





e



Specified

36.0

Targ

75%

74.0°



Wire-Free & Wireless Technology



Remote Monitoring Capabilities



Activation & Installation



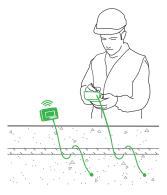
Real-Time Data Collection



Wireless Concrete Sensor for Temperature and Strength Monitoring

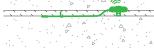
GIATEC

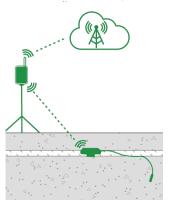
Conventional Wired Methods



SmartRock Wireless Sensor







Overview

SmartRock is the world's leading wireless sensor for monitoring concrete curing and hardening. This fully embedded sensor attaches to rebar using a built-in strap for hassle-free installation. SmartRock collects temperature data from two points independently: (i) the probe at the tip of the cable and (ii) from inside the sensor body. Calculate in-place concrete strength automatically using the maturity method (ASTM C1074). Your results and your temperature data are always accessible remotely and in real time via the free SmartRock mobile app and the Giatec 360 dashboard.

Features

Software

- Free mobile app for Android/iOS
- Project management tools, including live data sharing
- Smart alerts and notifications
- Al analysis of concrete pouring time and mix calibration errors with $\mathsf{Rox}_{i^{\mathsf{TM}}}$

Hardware

- Wire-free and wireless technology
- Rugged and fully waterproof, specifically designed to be embedded in concrete
- Two independent temperature measurements from cable and body sensors
- 24/7 remote monitoring capabilities with the SmartHub™

Benefits

- Measure temperature differentials in mass concrete
- Optimize curing conditions
- Accelerate formwork removal and post-tensioning
- Control quality in the field
- Open roads to traffic and finish tilt up construction sooner



Technical Specifications

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

Measurement Accuracy ± 1°C (± 1.8 °F)

Measurement Resolution $\pm 0.1^{\circ}C (\pm 0.18 ^{\circ}F)$

Measurement Frequency Once every 15 mins

Wireless Signal Range* Up to 12 m (40 ft)⁺

Temperature Cable Length 30 cm (12 in) / 3 m (10 ft) / By request: 15.2 m (50 ft)

Battery Life Up to 4 months

Data Formats: Export as PDF or CSV

Standards

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

- * Following installation depth requirements.
- + For longer range options, contact us.

23v3 Metric