

Giatic SmartRock2™

Wireless Temperature and Strength Sensor for Concrete



Giatic SmartRock2™ is a rugged mobile-based wireless sensor for monitoring the temperature of concrete from fresh to hardened stage. It also estimates concrete strength based on the maturity concept. SmartRock2™ can be placed in the concrete formwork (installed on the rebar) before pouring to monitor the temperature of concrete in situ. The continuous measurements are recorded on the SmartRock2™ memory and can be downloaded any time during the concrete setting and hardening onsite using the Android and iOS mobile apps on a smartphone or tablet device.

APPLICATIONS

SmartRock2™ can be used to monitor the temperature and strength of concrete. This information can be used for:

- Optimization of curing conditions
- Quality control in the field
- Estimation of strength (ASTM C1074)
- Formwork removal timing
- Post-tensioning
- Opening road to traffic
- Monitoring temperature gradients in mass concrete



HOW TO USE SMARTROCK2™ IN 3 EASY STEPS

① Install Sensor¹



¹Sensors should be installed within 5cm (2 inches) below the surface of concrete

② Pour Concrete



③ Read Sensor



FEATURES

Hardware

- Wireless technology
- Rugged and waterproof design
- Easy installation and activation by tying the wires together
- Extended temperature sensor cable for mass concrete
- Long battery life (up to 3-4 months after installation)
- Patents pending

Software

- Real-time data display (e.g. temperature, strength, max-min)
- Maturity calibration database
- Free Android and iOS apps for smartphone and tablet
- Easy data sharing between devices
- Project management tools
- PDF report generation
- Photos and blueprints attachment
- Goal limit setting for temperature and strength

TECHNICAL SPECIFICATIONS

Reading Range	-30 to 90°C (-22 to +194°F)
Accuracy	± 1°C
Measurement Frequency	Once every 30mins for 1 month
Wireless Signal Range ¹	Up to 6-8 meters (20-26 feet)
Dimensions	38 x 38 x 12 mm (1.5 x 1.5 x 0.5 inches)
Temperature Cable Length	40cm (16 inches) 3m (10 feet)
Battery Life	Up to 4 months after installation