SmartRock™ 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. The SmartRock™ 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 SmartRock™ memory and can be downloaded any time during the concrete setting and hardening onsite using the mobile application on a smartphone or tablet device.

**APPLICATIONS**

*SmartRock™ can be used to monitor the temperature of fresh and hardened concrete. This can provide information on:*

- Hardening of concrete (formwork removal timing)
- Optimization of curing conditions
- Heating and cooling processes
- Quality control in the field
- Concrete maturity
- Estimation of strength (ASTM C1074)
- Concrete mix design optimization
HOW TO USE SMARTROCK™ IN 3 EASY STEPS

1. Install Sensor
2. Pour Concrete
3. Read Sensor

FEATURES

- Wireless Bluetooth technology
- Ruggedized and waterproof design
- Real-time data display (e.g., temperature, strength, max-min)
- Easy installation and activation by tying the wires together
- Extended temperature sensor cable for mass concrete
- Maturity calibration curve database
- Long battery life (about 4 months in room temperature)
- Android and iOS apps for smartphone and tablet
- Easy data sharing
- Patents pending

www.humboldtmfg.com
1.800.544.7220
875 Tollgate Road, Elgin, IL 60123

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Range</td>
<td>-30 – 80 °C (-22 to +176 °F)</td>
</tr>
<tr>
<td>Resolution</td>
<td>± 0.5 °C</td>
</tr>
<tr>
<td>Wireless Signal Range</td>
<td>6-8 meters in concrete* (20-26 feet)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>38 x 38 x 12 mm (1.5 x 1.5 x 0.5 inches)</td>
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</tbody>
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