

Technical Data

Design	Sensor dimensions
Stainless steel with ceramic window	Sensor: 154 x 60 mm (length x width)
Range of measurement for moisture content and conductivity	Operating Temperature Range
The sensor covers water content ranges of different types of concrete for liquid concrete. Accuracy of up to 1-3 Liter/m ³ is achievable. The measuring system can determine concrete with w/c ratios from 0.35 to > 1. The radar-based conductance EC TRIME can be measured in a range of 0 – 50 mS/cm, dependent on concrete type or cement type	Suitable for use in ambient conditions: 0 – 60 °C
Power supply	Measuring field expansion
4.8 VDC, 2000 mAh battery capacity for more than 500 measurements per battery charge	Approximately 40 – 80 mm, depending on material and moisture
Calibration	Visualization
SONO WZ CONNECT is delivered with a universal calibration that provides reliable results for most fresh concretes. In addition, correction values can be used to account for the specific properties of the selected concrete mix	Wireless data transfer via Bluetooth to the IMKO CONNECT app. The simultaneous display of single measurements as well as the mean value and standard deviation allows a statement on the quality even during the course of the measurement

SONO WZ CONNECT

Wireless w/c analyzer for fresh concrete



Based on the established TRIME-TDR technology, SONO WZ CONNECT opens up a new dimension of quality control for the construction site – fast, convenient, and reproducible for a wide range of concrete recipes.



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The new dimension of on-site quality control

The quality of fresh concrete is crucial for the stability and lifespan of a building. Key parameters are the water content and the water-cement ratio (w/c ratio).

If too much water is added, the concrete's strength and density will suffer. If too little water is used, workability decreases and there is a risk of insufficient compaction.

Up to now, the amount of water contained in fresh concrete had to be determined by means of a laborious drying process, e.g. using the kiln drying. The process does not only consume time and resources, but also requires the concrete to be processed further during testing in order to prevent hardening. However, this parallel processing before the test results are available carries a risk of high consequential costs.



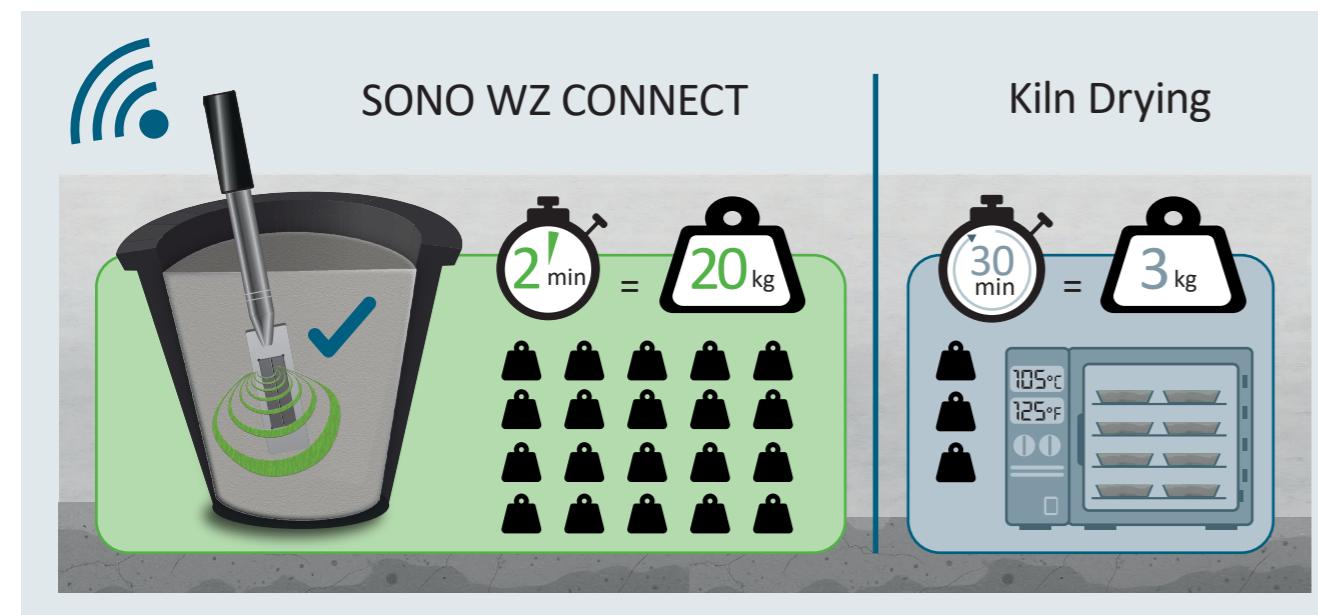
With its factory-set universal calibration, the SONO WZ CONNECT provides reliable measurement results for typical fresh concrete, but can be individually and precisely adjusted to specific concrete mix recipes if required.

It has never been so easy to determine the w/c value on the jobsite

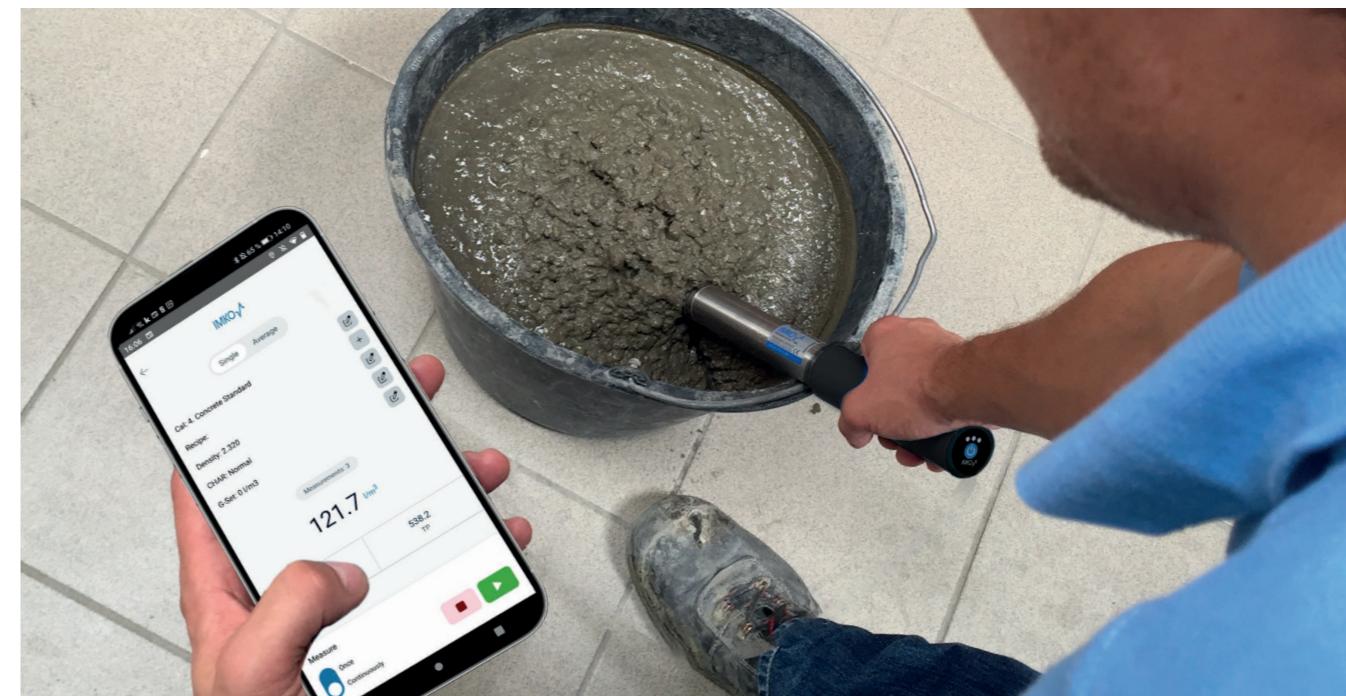
The probe can be inserted directly into fresh concrete and measurements can be started immediately. By using automatic averaging of multiple individual measurements, the user obtains a representative result for the water content in the fresh concrete. The ability to capture large amounts of material in a short time with SONO WZ CONNECT makes the measurement highly resistant to inhomogeneities and varying aggregate sizes in the concrete.

As a result, the SONO WZ CONNECT delivers reliable and representative measurement results as a basis for evidence-based decision-making.

The SONO WZ CONNECT uses TRIME TDR (Time Domain Reflectometry) technology, which measures the transit time of electromagnetic pulses in the material. Because this transit time is measured in the material, the SONO WZ CONNECT can measure the water content in concrete with high accuracy and precision. In addition to the water content, SONO WZ CONNECT also measures electrical conductivity (EC-TRIME). This allows conclusions on the cement content, thus providing the user with additional guidance in assessing the concrete quality.



State-of-the-art and user-friendly: The IMKO CONNECT app



No matter if Android or iOS: The SONO WZ CONNECT can be wirelessly connected to a mobile device via Bluetooth technology using the IMKO CONNECT app. In addition to displaying and storing measured values, the app provides access to all important parameters for measurements.

The SONO WZ CONNECT with wireless operation in the IMKO CONNECT app is the right choice if

- ... you want maximum mobility and convenience of use.
- ... the measurement data needs to be stored, documented and processed.
- ... the probe is to be used continuously in mobile applications. Thanks to the use of standard AA batteries, there is no need for a charger nor for the waiting times associated with charging. The energy-saving electronics allow several hundred measurements to be taken with one battery charge.

Your advantages with SONO WZ CONNECT

