Concrete Maturity Meter

LT-C6000 | Four-sensor online measurement system

Temperature history • Weighted maturity • Strength development



4 sensors

SIMULTANEOUS MEASUREMENT

1800 hours

MAXIMUM TEST DURATION

TS 13508 • -5 °C to +110 °C • 30 × 25 × 17 cm • 4 kg

Photographs and Measurement Components

Portable measuring unit, connections and sensor cables

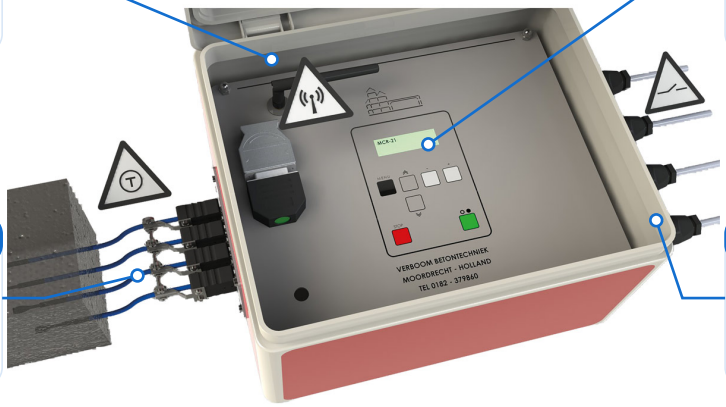
LT-C6000 uses four sensors to follow temperature history at different locations and depths in concrete. The system calculates weighted maturity and estimates compressive strength development using a suitable strength relationship. Data are monitored and reported online.

MEASURING UNIT

Collects temperature data from the sensors. Position the unit where it remains accessible.

DISPLAY AND CONTROLS

Area for monitoring the measurement and test setup. Check test duration and channel identification.

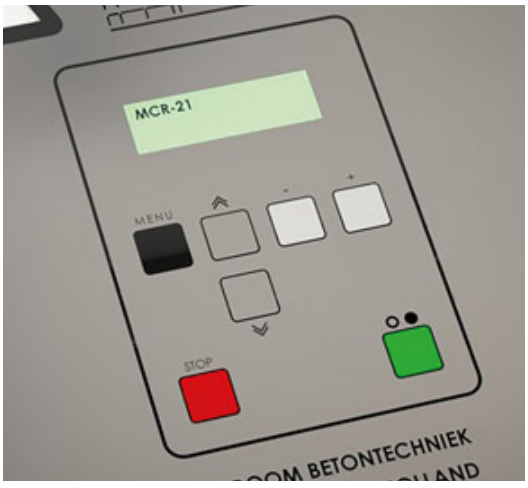


SENSOR CABLES

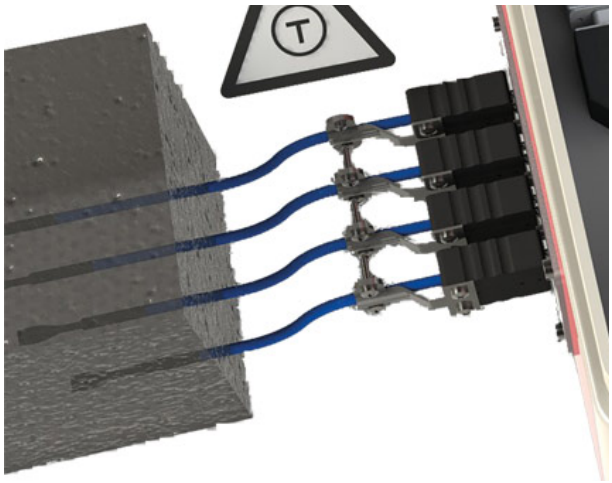
Connect measuring points to the instrument. Protect and identify cables during placement.

CONNECTION REGION

Sensor connection area. Associate each connection with its measuring point in the project.



Measuring unit and display region



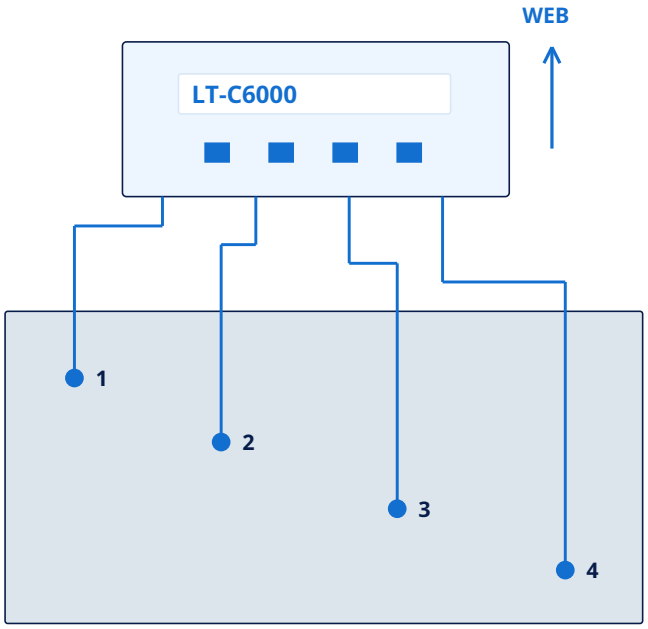
Sensor connections and cable arrangement

LT-C6000

Multi-Point Maturity Measurement

Identify mix • Position four points • Record temperature • Monitor development

FOUR MEASUREMENT POINTS • SCHEMATIC



DIFFERENT POSITIONS AND DEPTHS IN CONCRETE

TEMPERATURE + TIME + CALIBRATION

ESTIMATED STRENGTH • SCHEMATIC VIEW • NOT TO SCALE

Define Locations

Select positions and depths for four sensors. Record each point with its concrete region and channel number.

Record Temperature

Connect sensors and check measurement continuity. Follow temperature history at each point.

Assess Maturity

Relate temperature and time data to maturity. Assess strength using a suitable mix-specific relationship.

The maturity method relates temperature and time history to strength development for a particular concrete mix. Measurements at four points represent different regions. Assess each channel with its location and temperature history.

Calibration and Strength Relationship

Establish the strength-maturity relationship in advance using representative specimens of the concrete mix. Apply the suitable relationship when assessing field measurements.

Check its validity when the mix changes. Estimated strength depends on the calibration used and the parameters of the maturity calculation. Support the assessment with verification tests where required by the project.

Curing and Decision Records

Record sensor positions, pour time and curing conditions. Review temperature differences between points together with their measurement histories.

Assess formwork removal, post-tensioning or loading plans against the relevant strength criteria. Maintain conditions that permit cement hydration and make application decisions through responsible technical assessment.

LT-C6000

Technical Specifications and Workflow

LT-C6000 • Concrete Maturity Meter | Online • TS 13508

Specification	Technical Information
Product Code	LT-C6000
Sensor Arrangement	Four sensors; simultaneous measurements at different points/depths
Temperature Range	-5 °C to +110 °C
Temperature Resolution	0.5 °C
Test Duration	Up to 1800 hours; adjustable in hourly increments
Battery	Rechargeable NiMH; 6.0 V / 3050 mAh
Measuring Cable	Fe-CuNi thermocouple; usable up to 150 m
Data Monitoring	Online web access; automatic recording and reporting
Calculation	Weighted maturity and calibration-based strength estimate
Overall Dimensions	30 × 25 × 17 cm
Weight	4 kg
Standard	TS 13508

Channels, Calibration and Test Duration

Associate sensors with positions and depths. Verify the mix strength-maturity relationship, set test duration and check continuity of temperature records.

From Temperature to Strength Development

01
Identify
Define mix, pour and calibration.

02
Position
Fix four sensors at the selected locations.

03
Record
Monitor temperature and maturity development.

04
Assess
Compare estimated strength with project criteria.

Product Page | liyatest.com.tr/en/urun/concrete-maturity-meter/