

# CONCRETE THICKNESS GAUGE

MODEL CTG-2

Verify Concrete Slab Thickness & Integrity



Detects: Honeycomb, Voids, Cracks and Delamination



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## Meets ASTM Standard C1383-04(10)

Olson Instruments offers an Impact-Echo device, (Concrete Thickness Gauge, Model CTG-2). This hand-held instrument tests concrete slab thickness and integrity. The CTG-2 is an easy to use, battery-powered, device.

Requires no special knowledge or training – connect the CTG-2 to your laptop or tablet and start testing with Olson’s WinCTG2 software. For greater accuracy, calibrate the unit at a location of known thickness to obtain the concrete velocity for that job.

### CTG-2 applications include:

- Elevated Slabs (i.e. Bridge Decks, Parking Garages)
- Slabs on Grade (i.e. Roads, Runways & Floors)
- Walls & Precast Panels
- Ceilings
- Tunnel Linings & Concrete Pipe
- Columns & Beams
- Foundations (thicknesses up to 6 feet)



## Specifications

Thickness Range	3.2" to 20" (81 mm to 50.8 cm) in standard mode 20" to 6' (50.8cm to 1.8m) in thick mode
Accuracy	± 2% when calibrated on a known thickness
Data Collection	Works with most Windows 7-10 devices
Frequency Resolution	10Hz
Sampling Rate	45,454 samples/second
Numbers of Samples Acquired per Test	4,545
Maximum Nyquist Frequency	22,700 Hz
Weight	<ul style="list-style-type: none"> <li>■ 5 lbs (2.3 kg) shipping weight</li> <li>■ 1 lb (0.5kg) Test Head</li> </ul>
Cable Length for Test Head	3 ft (91 cm)
Software Features	<ul style="list-style-type: none"> <li>■ Automatic Thickness Picking</li> <li>■ Manual Thickness Picking</li> <li>■ Concrete Velocity Calibration</li> <li>■ Time &amp; Spectral Data: Displays for Data QA</li> </ul>
Report Capability	<ul style="list-style-type: none"> <li>■ Use X and Y coordinates to set up a test grid</li> <li>■ Generate a thickness summary table exported to most spreadsheets in comma separated format</li> </ul>
Power	CR123A 3V long life lithium batteries

## Determines Thickness Based on Impact Echo Principle

### Features

- Ruggedized, hand-held test head with integrated displacement transducer and solenoid impactor
- No coupling agents required for use of test head on concrete
- Works on cured, hardened concrete of an elevated deck or on grade
- Works through paint, epoxy, and most types of bonded ceramic tile
- Switch between English (inches) or Metric (millimeters) units with the click of a button
- Easy velocity calibration at known thickness location, or use Olson's default parameters
- Thickness data table can be imported into most spreadsheet programs
- Save results for later review

\*To test concrete and acquire data, the CTG-2 system must be used with a Windows 7-10 computer or tablet running Olson Instrument's WinCTG2 software. The required computer or tablet must be provided by the user.

### About Olson Instruments

Headquartered in Wheat Ridge, Colorado, USA, Olson Instruments specializes in **Nondestructive Evaluation** equipment for the civil engineering industry. We are an established manufacturer of sensors and data collection systems since 1993.

Olson Engineering Inc. specializes in **Nondestructive Evaluation and Internal Condition Assessment of Civil Infrastructure** throughout the world as well as **Geophysical Services** for engineering purposes.

To learn more visit:  
OlsonInstruments.com  
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**No need to drill, core or excavate to determine concrete slab thickness**