# **CONCRETE THICKNESS GAUGE**

Model CTG-2

# Verify Concrete Slab Thickness & Integrity



#### Detects: Honeycomb, Voids, Cracks and Delamination

# 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.



#### Olson Instruments, Inc.

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### **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	II 5 lbs (2.3 kg) shipping weight II 1 lb (0.5kg) Test Head
Cable Length for Test Head	3 ft (91 cm)
Software Features	<ul> <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> <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 OlsonEngineering.com



### No need to drill, core or excavate to determine concrete slab thickness