



## CHUM

### Cross Hole Ultrasonic Monitor

The CHUM (Cross Hole Ultrasonic Monitor) uses the Crosshole Sonic Logging CSL testing method to perform high-resolution quality control of deep foundations.

- Up to 150m (450') deep
- Tomography support Standard
- ASTM D6760, AFNOR NF P 94-160-1
- Integrated support for DFI CSL Rating Criteria

#### Applications

For testing pile integrity using the CSL method, of medium to large size piles, with supporting access tubes. CHUM also supports 3D Tomography covered in this catalog.

### Fast and Reliable Crosshole Deep Pile Foundations Testing



#### Reliable

- 100% QA tests at 16-atmosphere pressure, vibration, and extreme temperature.
- The CHUM case can tolerate drops and shocks.
- 3 years warranty!
- Rugged connectors, cables & sensors
- 10 years free software upgrade



#### Easy to Use

- Usually, no training is needed, and the system can be self-taught in hours. (No expensive training days)
- Supports AGC (Automatic Gain Control) for simple, fast, and accurate performance in dynamic conditions.



#### Top Performance

- Up to 150m (450') deep. (Deeper optional)
- A clean signal on 3m and more on solid concrete.
- Highest SNR. Delivers the cleanest signal in the industry.
- Productivity - 4 tubes X 25m piles - 8 such piles tested in 2 hours!

<b>Physical</b>	<b>Housing</b>	Rugged, Environment-proof, water-resistant housing.
	<b>Dimensions</b>	430mmL x 325mmW x 105mmH (instrument only)
	<b>Weight</b>	3.8 kg (instrument only) 5.0 kg (instrument with typical tablet) 16.0kg (Typical shipping)
	<b>Temperature range</b>	Operating : -25°C to 60° Storage : -40°C to 70°C
<b>Power</b>	<b>Internal</b>	Rechargeable Lithium-Ion battery 11.1V 4.4Ah (Two days of typical use)
	<b>External</b>	100-240V AC operation/charging
<b>Standards</b>	<b>ASTM D6760 –16</b>	Meets or exceeds
<b>Technical</b>	<b>Transducers</b>	Dual-Purpose transceivers, 50kHz nominal, pressure-tested housing, 25mm diameter.
	<b>Cables</b>	tested housing, 25mm diameter
	<b>Sample rate</b>	Heavy-duty polyurethane wound on a reel
	<b>Gain</b>	500kHz (2μS resolution)
	<b>Depth meters</b>	8-level automatic gain control (AGC) Two 24-bit counters. <0.1% error
<b>Performance</b>	<b>Pile lengths</b>	1m to 150m
	<b>Tube spacing</b>	Up to 5m in good concrete
	<b>Productivity</b>	Up to 3000m/Day by a single operator
	<b>Storage</b>	Unlimited
<b>Requirements</b>	<b>Computer (Minimum)</b>	Windows XP/Win7/Win10/Win11. 800x600 resolution or higher
<b>Output</b>	<b>Reporting</b>	Arrival time, energy, and wave speed curves, “waterfall” presentation, fuzzy logic and 3D tomography
	<b>Language</b>	Multi-lingual user interface and reporting
<b>Options</b>	<b>Cable reels</b>	50m, 100m, 150m, and custom lengths
	<b>Software</b>	3DT - Three-dimensional tomography (Also provided as a service over e-mail)
	<b>Miscellaneous</b>	12V DC car battery power adapter