

Cross Hole Ultrasonic Monitor (CHUM)

Technical Specifications

General

- Extremely rugged aluminum housing
- Dimensions (mm – instrument only): 250L x 210W x 74H
- Weight (instrument only): 2.25 Kg
- Power supply (internal)- Rechargeable NIMH battery, 12V 2.7 Ah, up to five hours of typical use.
(external)- 100-240V AC operation/charging and 12 V DC car battery adapter



Environmental

- IP65 environment-proof
- Operating temperature: -25 to 60 degrees Centigrade
- Storage temperature: -40 to 70 degrees Centigrade

Peripherals / Options

- Ultrasonic emitter, ceramic element type, 50 kHz nominal, 25mm diameter, on reel w. 50 m cable (standard), 100 m optional.
- Ultrasonic receiver, ceramic element type, 50 kHz nominal, 25mm diameter, on reel w. 50 m cable (standard), 100 m optional
- Depth meter: one bi-directional, 500 pulses per revolution (standard), additional bi-directional depth meter enabling real-time tomography (optional).

Analog to Digital Interface

- 250 kHz sampling rate, 12 bits.
- Eight automatic gain levels (20 bits dynamic range)
- Two 32-bit up-down counters

Software:

- Windows-based (Supports Win98SE, W2K, XP, TabletPC, W2K3)
- Automatic determination of first arrival time (FAT)

Output:

- Arrival time, attenuation, relative energy and wave velocity curves, "waterfall" presentation, dual presentation, fuzzy-logic and parametric tomography, all in either B&W or color.
- Report generation in Windows-based word processing format.
- Report are customizable to any language/font and to many styles