



Pile Dynamics, Inc.

Quality Assurance for Deep Foundations

Cross-Hole Analyzer (CHAMP-XV) Specifications

15-244

Main Unit

Physical

Size: 320 x 250 x 68 mm (12.6 x 9.8 x 2.7 in)

Weight: 5 kg (11 lbs.)

Display: 26.4 cm (10.4 in) sunlight readable touch screen display, resolution 1024 X 768

Operating temperature range: 0° to 40°C (32° to 104°F)

Power: 4-hour continuous data collection with internal 12V battery, or 100 – 240 VAC power supply

Charging Time: 6-hours maximum

Electronic

Computer with 60 GB SSD internal drive and 4 external USB ports

12-bit analog to digital (A/D) converter

Sampling rate: 500 kHz, 1 MHz and 2 MHz; user selectable (equivalent measuring accuracy 2µs, 1µs and 0.5µs)

Scan rate: 32 scans/seconds

Record size: 250, 500 and 1000 points, user selectable

User adjustable gain, trigger level and transmit power level

Other

Windows® 7 OS

Operates in English or SI Units

Furnished with CHA-W software

Full one-year warranty

Technical manual provided in PDF form on a USB drive

Probes

Physical

Size: 215 mm length x 25 mm diameter (8.46 in length x .984 in diameter)

Element: Ceramic

Housing: Nickel plated brass

Independent depth encoder for each probe

Maximum measuring distance (probe separation): 3 m (9.84 ft)

Electronic

Receiver: tuned to 45 KHz nominal

Transmitter frequency (nominal): 45 KHz

Transmitter voltage: 200, 400, 600 or 800 Volts; user selectable

Cables

Cable material: heavy duty polyurethane outer jacket

Cable length: 60, 100 or 150 m (196, 328, 492 ft)



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Cables spooled over tripod (standard) or with optional Motorized Probe Deployment System, only with the 60 m cables (196 ft)

Motorized Probe Deployment System

Main Unit

Size: (2) 380 x 480 x 405 mm spools (14.96 x 18.89 x 15.94 in)

Weight: 11.3 Kg each (24.91 lbs.)

Includes 60 m (196 ft) cable detachable from spool

Includes depth encoder for each probe, attached to frame

Motor Control Unit

Size: 240 x 160 x 90 mm (9.44 x 6.29 x 3.54 in)

Weight: 1.6 Kg

Powered by either external battery (8-hour duration), 12VDC car battery, or 100 – 240 VAC with 12 VDC converter

Fast charger to recharge the external battery in 4 hours

Variable probe pull rate: 0.150 to 0.915 m/sec (low, medium, high speed selection)

Resettable circuit breaker motor protection

Operating temperature range: 0° to 40°C (32° to 104°F)

Storage temperature range: -10° to 65°C (14° to 149°F)

Other

Includes pulley for placement at the tube

Includes roller guide for routing cable through re-enforcement rebar cage or over casing