



*Pile Dynamics, Inc.*

**Quality Assurance for Deep Foundations**

## **Cross-Hole Analyzer Specifications (CHAMP-Q)**

June 2021

### Main Unit

#### *Physical*

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

Weight: 5 Kg (11 lbs.)

Temperature range: 0 to 40°C (32 to 104° F) operating; -20 to 65°C (-4 to 149° F) storage

Display: 26.4cm (10.4"), sunlight readable, resolution 1024 X 768

Built in capacitive touch screen

Video Outputs: HDMI

Power: 4-hour continuous data collection with internal 12V battery

Charging Time: 6-hour maximum

#### *Electronic*

Microsoft Windows® 10 Operating System

Minimum of 128 GB SSD internal drive

Ethernet port

4 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*

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

Element: ceramic

Housing: nickel plated brass

Independent depth encoder for each probe

Maximum measuring distance (probe separation): 3m

#### *Electronic*

Pressure tested to 175 m (560 ft)

Receiver: tuned to 45 KHz nominal

Transmitter frequency (nominal): 45 KHz

Transmitter voltage: 800 volts



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*Cables*

Cable material: heavy duty polyurethane outer jacket

Cable length: 60, 100 or 150 m

Cables spooled over tripod (standard) or with the pile encoder