Cross-Hole Analyzer (CHAMP-XV) Specifications

Main Unit

*Physical*
Size: 320 X 250 X 68 mm (12.6 X 9.8 X 2.7 inches)
Weight: 5 kg (11 lbs.)
Display: 26.4 cm (10.4 inch) sunlight readable touch screen display, resolution 1024 X 768
Operating temperature range: 0˚ – 40˚ C
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
Element: ceramic
Housing: nickel plated brass
Independent depth encoder for each probe
Maximum measuring distance (probe separation): 3m

*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
Cables spooled over tripod (standard) or with optional Motorized Probe Deployment System (60 m only)

Motorized Probe Deployment System

**Main Unit**
Size: Two 380mm X 480mm X 405mm spools
Weight: 11.3Kg each
Includes 60 m cable, detachable from spool
Includes depth encoder for each probe, attached to frame

**Motor Control Unit**
Size: 240mm X 160mm X 90mm
Weight: 1.6 Kg
Powered by either external battery (8 hours duration), 12VDC car battery, or 100 – 240 VAC with 12VDC 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
Storage temperature range: -10° to 65°C

**Other**
Includes pulley for placement at the tube
Includes roller guide for routing cable through re-enforcement rebar cage or over casing