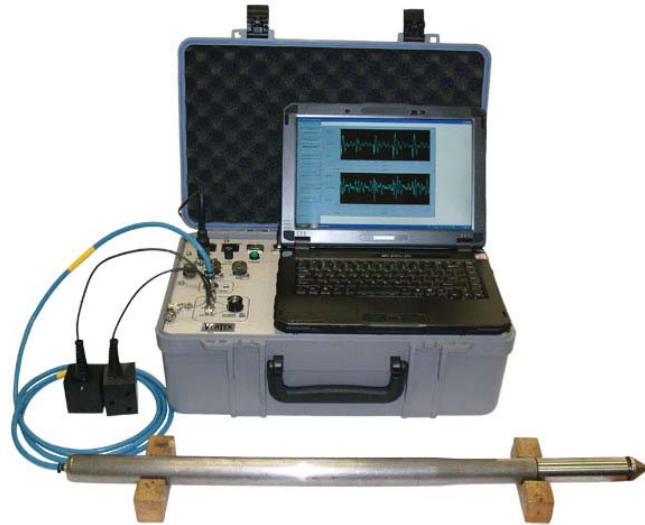


VTK Series™

DataPack 2010

CPT Data Acquisition Unit

For use with VTK Series CPT cones including: Seismic, Vision, FFD, & SMR cones. Works with Windows 7 or XP and uses USB connectivity.



VERTEK's DataPack 2010 is a feature-packed, field portable Cone Penetrometer Technology (CPT) data acquisition and analysis package combining the capabilities of our digital CPT cones, the FFD (fuel fluorescence detector) probes, seismic geophone equipped cones, and other specialized Vertek probes. Developed as a simple 'all-in-one' solution for Geotechnical and Environmental commercial CPT service providers, this new version incorporates USB connectivity to make computer selection easy. All models of the new DataPack 2010 support FFD investigations when used with our LED FFD probes. Original FFD (mercury lamp) probes will work with an original FFD DataPack only. FFD probes can be updated to the new LED operation and then can be used with the new DataPack 2010.

Easy to Operate - Sensor specific data (calibration factors, serial numbers, and sensor type) are stored in each sensor module in the cone, and are automatically transmitted to the DataPack 2010 with each penetration test, making the operation of the unit simple and reliable. Easy-to-follow pull down menus allow for ease of test monitoring and field diagnostics.

Efficient Data Collection – A digital CPT probe is the heart of the system. The standard probe includes tip, sleeve friction, and pore pressure sensors and optional modules for seismic, dual axis inclination, and resistivity can be added. The system stores unlimited data points per channel for each test and data is saved to disk after each sample to ensure data integrity. Measurements are also plotted in real time on the computer screen during the push, providing immediate data from the probe and alerting the operator to potential problem layers. Optional shut down circuits can be incorporated to stop the push unit if pre-set stress alarm levels are exceeded.

Field Portable – The DataPack 2010 is housed in a water-resistant instrument case and requires use of a COTS, Windows based laptop. Vertek recommends use of a ruggedized unit for CPT applications.





CONE PENETROMETER PRODUCTS

Our products
are serviced,
calibrated
and

MADE IN

U. S. A.

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GPS Ready – The DataPack 2010 is equipped with a 9 pin connection to accept GPS input from most portable GPS units. This location information is easily attached to each CPT test data file.

Report-Quality Field Plots – The DataPack 2010 comes with a complete software package for acquisition, processing, and plotting CPT data. The DataPack 2010 generates report-quality plots in the field on any Windows supported printer (color or gray-scale). Plot scales can be set automatically and a wide variety of engineering parameters can be selected. With current communication technology data is easily transmitted to project engineers anywhere.

Expandable – The DataPack 2010 has an auxiliary channel which provides 4 vdc excitation voltage and 200 gain bi-polar signal input, which allows the use of an optional tip, sleeve and pore pressure verification package or other optional devices.

High-Powered Data Analysis – Data analysis software is included with the DataPack 2010, allowing the operator to display both the test data and derived parameters in formats appropriate to client requirements. Standard classification algorithms based on sleeve friction and pore pressure ratios are included for classification of soil types. Journal published empirical correlation are employed to estimate friction angle, undrained shear strength, standard penetration test (SPT) blow count, relative density, and over-consolidation ratio. Pore pressure algorithms are built into the software and the results can be use to estimate the hydraulic conductivity of cohesive soils.

Computer Requirements – Vertek recommends use of ruggedized computers with daylight readable screen for CPT operations. (Vertek can supply the computer if desired). The computer should have at minimum 1GB RAM and Pentium III processor. The CPT software will work with either Windows 7 or XP (pro version). The DataPack 2010 eliminates the need for serial ports or PCM slots due to USB connectivity.

Physical Specifications -

- Power: 12VDC (5 amps) using provided power supply (100-240vac, 60 hz)
- Enclosure is durable molded water resistant suitcase type.
- Size: 29.5" W x 9" H x 14.5" D
- Weight: 20 pounds (9 kg)

