



Pile Driving Analyzer[®]

Pile Driving Analyzer[®] (PDA-8G)

High strain dynamic load testing and pile driving monitoring system.

Reliable. Efficient. Effective.

The Pile Driving Analyzer[®] (PDA) system is the most widely employed system for Dynamic Load Testing and Pile Driving Monitoring in the world. The PDA eighth generation (PDA-8G) acquires data from accelerometers and strain transducers attached to a pile or shaft so that High Strain Dynamic Tests (ASTM D4945) may be performed. The tests require the impact of a pile driving hammer or a suitable drop weight.

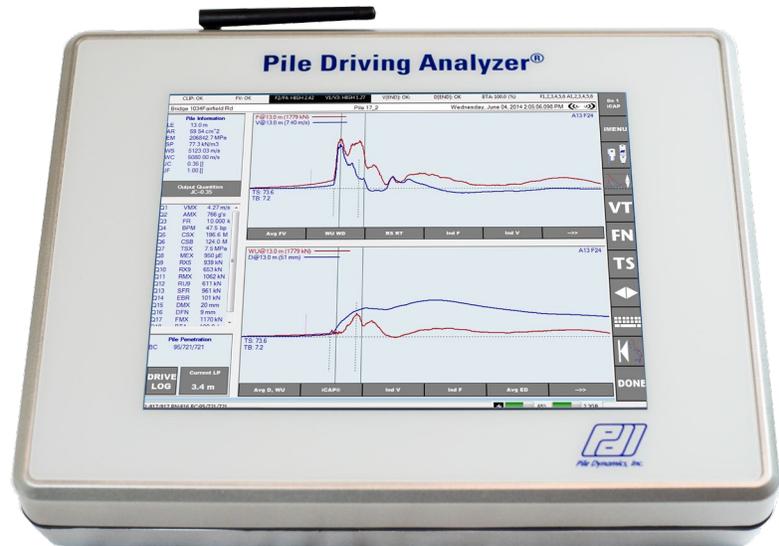
The PDA-8G evaluates:

- Bearing capacity
- Structural integrity
- Driving stresses
- Hammer energy

The PDA-8G is designed with the field engineer in mind. The 8G allows for up to 16 channels of data acquisition (wireless mode) with “smart” sensors knowing their calibrations and allowing any sensor to plug into any acquisition channel. Its screen, with a higher resolution LCD than previous generations of PDAs, displays measured signals and calculated results in real time, and allows more options to be viewed simultaneously.

High Strain Dynamic Load Testing with the PDA-8G

Preliminary field results are further analyzed with the CAPWAP[®] signal matching software, for results that correlate very well with static load tests. High Strain Dynamic Load Tests may be performed on drilled shafts, continuous flight auger, cast-in-situ or driven piles. The PDA-8G has new features that make it easier to use for drilled shaft testing, such as the option of conducting the test with up to eight channels in wired mode and 16 channels in wireless mode. When a ram of sufficient mass is used, high strain dynamic load tests performed with the PDA may meet Rapid Load Test standards (ASTM D7383).



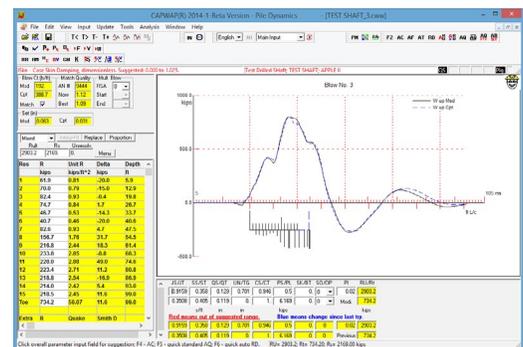
Pile Driving Monitoring with the PDA-8G

Pile Driving Monitoring helps establish the Driving Criterion and contributes to safe and economical production pile installation. The PDA-8G calculates the capacity of driven piles at the time of testing (by Case Method and iCAP[®], real-time signal matching for uniform driven piles), driving hammer performance, driving stresses, and evaluates pile integrity. The enhanced data transmission of the PDA-8G allows testing with high speed hammers having blow-rates as high as 120 bpm, without loss of data.

Wireless Mode

- No cables from the accelerometers and strain transducers to the PDA
- Fast signal transmission of up to 16 data channels to 100m (330ft) through WiFi

The PDA-8G may also be connected to accelerometers and strain transducers with traditional PDI wireless sensors traditional cable connections.



SiteLink® (Remote Testing) Technology

- A cost and time efficient alternate to traditional on-site testing
- The engineer performs Pile Driving Monitoring or Dynamic Load Tests from anywhere via an internet connection
- Real time field-to-office data transmission via Internet
- Simple field setup



Four or Eight Universal Data Channels

Most High Strain Dynamic Tests require only two strain transducers and two accelerometers installed near the top of the foundation. The pairs of sensors are sufficient to obtain the force and velocity records needed for the PDA calculations, thus making four channels of data acquisition adequate for most driven pile tests.

Eight channels of data acquisition, four strain transducers and four accelerometers, are recommended for dynamic tests on large diameter cast in place piles. Eight channels are also essential when additional sensors are installed at additional locations along the length of the foundation (for example by embedding sensors near the toe of a concrete pile). The eight wired channels and all wireless channels of data acquisition for the PDA-8G are universal: any combination of accelerometers and strain transducers may be used.

All PDA-8G channels, either in traditional PDI wireless sensors, WiFi or traditional cabled modes, are compatible with Smart Sensors (no need to input sensor calibration into the PDA).

Please contact Pile Dynamics for information on compliance with standards from other countries.

For complete current specifications visit www.pile.com/technical-specifications.

Pile Dynamics, Inc. (PDI) is the world leader in developing, manufacturing and supplying state of the art QA/QC products and systems for the deep foundations industry. The company is headquartered in Cleveland, Ohio, USA, with offices and representatives worldwide. For additional information visit us at www.pile.com or contact info@pile.com today.



- Field-to-office data transmission with SiteLink
- Up to 16 channels of data acquisition available with eight wifi boxes and any combination of strains and accelerometers
- Traditional PDI wireless sensors, WiFi or traditional cabled options available
- Complete with CAPWAP®, GRLWEAP, and iCAP® software