# **P8100 DYNAMIC FOUNDATION PILE TESTER**

## To assess the integrality of concrete pile and identify the extent and location of the pile defect

The P8100 Foundation Pile Dynamic Detector is used to assess the integrality of concrete pile and identify the extent and location of the pile defect by using the reflected wave method.

It can be used for testing perfusion pile and hammer pile and also for testing the exposed top surface of constructions such as pillars.

The P8100 is provided with 2 channels of data acquisition and can acquire data from an accelerometer or an instrumented hammer or from two accelerometers.



### Features :

- Dual-channel simultaneous sampling, multi-directional testing for each pile makes the work more efficient.
- True 24 bit A/D data acquisition, provides high resolution waveform avoiding the noise and signal distortion caused by large floating point amplification.
- 1MHz high speed data acquisition minimum sampling time resolution of 1us, can provide more useful information, more conductive to the **discovery of shallow** defects.
- Semi transparent, high brightness, TFT color LCD screen.
- Stores waveform images for each tested pile.
- Files arranged by projects ® piles; clear and convenient, project/pile testing data can be easily accessed, edited, or deleted.
- Wavelet processing can effectively collect reflecting signal from pile bottom, more accurate in complex of situations judgement.
- Real time on-site test wave can be treated with smoothing, differential, filtering, power exponent and linear amplification wave processing methods.
- The signal noise can be eliminated by taking the superposition of multiple signals. The superposition can be viewed at any time, allowing the poorer quality signals to be ignored.
- Standard USB port, thumb drive can be used for downloading date or to updates software.
- Professional Windows OS-based analysis software is fully featured, provides a very user friendly interface, allowing detailed test reports. Print settings are flexible with print preview. Built in help menu can guide users when necessary, and also includes testing related rules.

#### Specification :

Item	Specifications
A/D resolution	24 bit
Number of channels	2
Control Mode	A8 Embedded platform
Data storage	>=4GB
Trigger	Signal trigger
Noise voltage of the system	<=mV
Amplifier frequency range	10Hz ~ 10kHz
Sampling time intervals (µs)	1 ~ 64000adjustable
Max length of sampling	4096
Amplitude nonlinear degree	<= 10%
Frequency range of Transducer	0.5 ~ 9000 Hz acceleration mode
Interference between channels	<=1%
Dimensions	210mm x149mm x 60mm
Monitor	5.7 inch, high brightness, TFT color LCD
Ports	USB port
Dynamic range	>=184 dB
Input impedance	>=200 MΩ
Time resolution	1µs
Gain error	<=1 dB
Timing accuracy	0.1%
Sentinel magnify (time)	1, 2, 5, 10, 20, 50, 100, adjustable
Max magnify (times)	256000
Transducer sensitivity	>=100 mv/g (acceleration mode)



Continuous operating hours	>5 hrs
Power	Battery, Lithium ion, Rechargeable
Weight	1.3kg (lithium battery included)
Wi-fi	Yes

### **Product Supply includes:**

P8100 instrument, ICP accelerated transducers, hammer, and waterproof case









P8100

Accelerated Transducers

Hammer

Waterproof Case

Item Code: ST-PT8100