

GPC

Pile Driving Analysis (PDA) system



The GPC is the PDA system from Piletest. It is the next generation of dynamic pile testing systems, designed with simplified software and higher ease of use than incumbent systems. Professor George G. Goble, the pioneer of dynamic pile analyzers, designed the GPC system. It comes with -

- Lossless Wireless Transmission.
- Simple single main (data) unit for both sides of the pile.
- Comboducer Strain gauge + Accelerometer transducers combined in one sensor.

 Prevents nonvertical accelerometer mounting (common with the incumbent system) with fewer bolts.
- Eight channels Dual GPC systems for four Comboducers or Single GPC with averaging cables.
- ASTM D4945 Standard compliant.

Applications

You only need to connect two Comboducer (dual-purpose) sensors to test a driven pile dynamically while it is driven into the ground. Lossless wireless transmission of data from the main unit, hanging on the driven pile, makes field work faster and simpler.

Fast & Simple Pile Driving Analysis (PDA) system in Real Time



Reliable

- Lossless wireless communication - 100% reliable wireless connection.
- The GPC main unit was designed to tolerate the harsh pile driving conditions. Watch
- 3-year warranty!
- Rugged connectors and sensors.



Easy to Use

- Single sensor for two transducers, with
 Comboducer = Accelerometer
 + Strain gauge.
- One operator can handle the lightweight GPC system.
- Easy and Simple to use software.



Top Performance

- Dual channel lossless WiFi connection.
- N_GAPA Top-notch
 Automatic Pile Analysis
 software for signal matching analysis, proven to be equal to and faster than CAPWAP.
- Real-time analysis of nonuniform piles in the field.



GPC – Technical Specification

Dhyaical	Housing	Industrial grade DAC enclosed in a durable
Physical	Housing	aluminum housing.
	Dimensions	82 mm x 108 mm x 280 mm (Ver 1.4)
	Weight	1.9 Kg (Ver 1.4) 10.0 Kg (Typical shipping)
	Temperature range	Operating: -25°C - 55°C Storage: -40°C - 80°C
	Humidity	90% condensing
	Waterproofing	IP61 (Protection from condensation)
Power	Internal	Rechargeable Lithium Ion battery,
		2 hours charge (Supports full day of typical use 5-8 hours)
	External	100-240V AC Charger
Standards	ASTM D4945	Meets or exceeds.
	EN ISO-22477-4	Meets or exceeds.
Technical	Wireless	WiFi – 802.11ac.
	Cable (optional)	Standard CAT5 RJ45.
	Strain gauge Resolution Sensitivity Nonlinearity Range	0.5 με 500 μ/mV/V Nom. <0.05% -3600 με - +3600 με
	Accelerometer Resolution Sensitivity Nonlinearity Range	Piezoresistive 0.01 g 0.060 mV/g Nom. <0.05% -5000 g - +5000 g
	Sampling Frequency	10 KHz – 50 KHz
	Sampling Resolution	24-bit
Performance	Pile Lengths	Unlimited
	Pile Type	Unlimited (Concrete, Steel, Timber) Any non-uniform piles
Requirements	Computer (Minimum)	Microsoft Windows OS Win 7 /Win 10/ Win 11 1366x768 resolution or better USB port + WiFi 802.11ac Recommended for BYOD: Tablet PC (outdoor display)

