



The **digital D-Cone** series represents Geomil Equipment's latest innovation in Cone Penetration Testing (CPT). Since the introduction of the CPT in 1932, our cones have evolved from mechanical to electrical and now to digital. For over 80 years our equipment has contributed to the successful completion of many challenging projects across the globe.

Drawing on our experience and proven technology the **all new, next generation, digital cones** are developed in-house. The D-Cone measures the cone resistance ( $q_c$ ) and local sleeve friction ( $f_s$ ) using strain gauged precision load cells. In addition, the dynamic pore water pressure ( $u$ ) is measured by a piezo element and an accelerometer is used to monitor the inclination in X and Y directions.

The standard offered measuring range is 100 MPa for  $q_c$  and 1 MPa for  $f_s$  with additional ranges available on request.

The D-Cone is part of the newly developed Geotechnical Sensor Network (GSN).

## D-Cone - Key Features

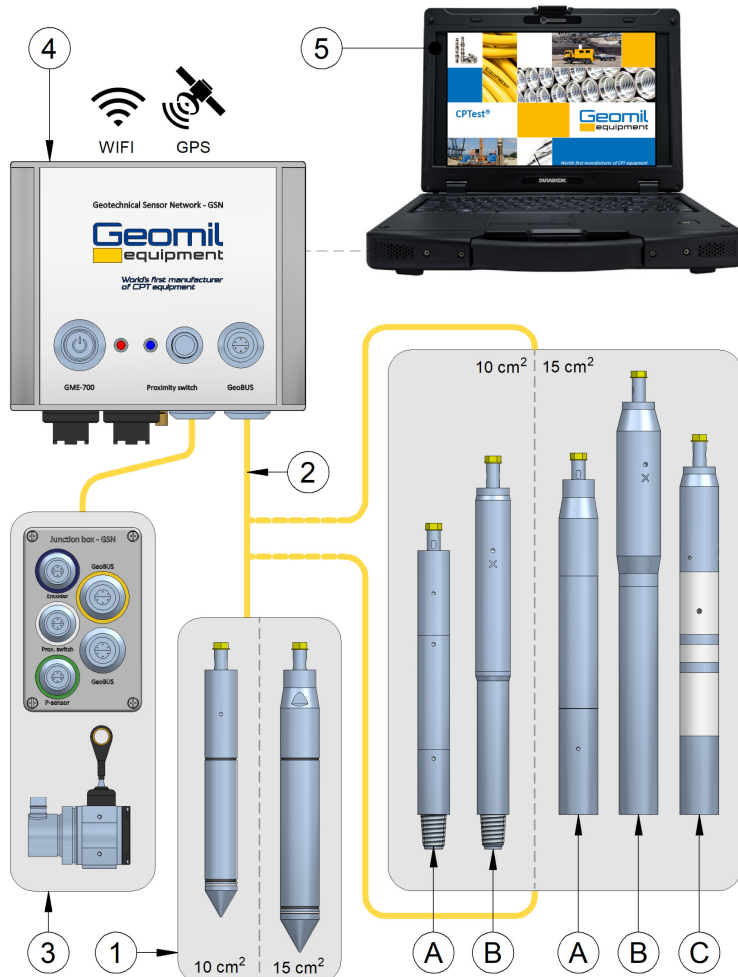
- ▼ Digital cone and data acquisition system for onshore and offshore applications
- ▼ Large onboard memory for long operation
- ▼ High performance 24 bit system, 18 bits noise free
- ▼ Auto cone recognition, calibration data stored in the cone
- ▼ Favourable geometrics
- ▼ Excellent wearing characteristics



## D-Cone - Specifications

<b>Cone area</b>	5, 10, 15 or 25 cm <sup>2</sup>
<b>Load cell arrangement</b>	Subtraction or compression
<b>a-factor</b>	Better than 0.8
<b>b-factor</b>	0
<b>Filter position</b>	$u_1$ , $u_2$ or $u_3$
<b>Standards compliance</b>	ISO 22476-1:2012 ASTM D5778-12
<b>Application class</b>	Class 1 and class 2 standard * Class 1+ upon request * depending on configuration





A standard Geotechnical Sensor Network (GSN) for CPT consists of:

- ① Digital subtraction or compression type D-Cone
- ② High quality GSN CPT cables in standard or custom lengths
- ③ Digital depth encoder
- ④ Digital data acquisition system GME-700 with GPS as standard and optional WiFi
- ⑤ Data acquisition software package CPTest

Optional add-ons:

- ▼ Wireless system
- ▼ Battery add-on (A) (for memory or wireless\* use of cone)
- ▼ Seismic module (B)
- ▼ SMP (Soil Moisture Probe) module (C)
- ▼ Magnetometer module
- ▼ Dipole module
- ▼ Temperature sensor module
- ▼ Client specific module

All listed add-ons or modules are provided with a custom connector to allow easy integration with any D-Cone.

A GSN can also be equipped with other geotechnical instruments, such as: shear vanes, tilt meters, piezometers etc. to provide a complete geotechnical data package.

### CPTest Data Acquisition Software

- ▼ New CPTest acquisition software specifically designed for use of a GSN (with D-cone)
- ▼ 64-bit application suitable for Microsoft Windows 7 or above
- ▼ Auto recognition of the connected GSN sensors
- ▼ Data real time visible
- ▼ Compliant to latest GEF data standard
- ▼ Specific features for offshore use

For more technical information or a quotation based on your specific requirements please contact [sales@geomil.com](mailto:sales@geomil.com) or call us at +31 172 427 800.

