





## **ZFG 3000**

**Light Weight Deflectometer** (LWD)

according to ASTM E2835-11 and TP BF-StB Part B 8.3

calibrated according to TP BF-StB Part B 8.4





## DETAILS

- Load device
  210 mm, 1.140 mm, 15 kg
  (Width, height, total weight)
- Base plate
  300 mm, 15 kg
  (Diameter, weight)
- Electronics case splash-proof with transparent cover 160 mm, 210 mm, 280 mm (Width, height, depth)



- Integrated high-precision GPS/GNSS receiver and printer
- WIFI (simple wireless connection to MS Windows computers and Android/iOS mobile devices)
- Automatic calculation of deflection, s/v value and deformation modulus E<sub>vd</sub>



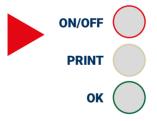
- Load device with 10 kg drop weight, impact load 7.07 kN, measuring range E<sub>vd</sub> 15-70 MPa (MN/m²)
- Ready for optional load device with 15 kg drop weight and 1.5 times impact load (10.605 kN); measuring range E<sub>vd</sub> 70-105 MPa (MN/m²)

Light Weight Deflectometer ZFG 3000 is used to determine the dynamic deformation modulus  $E_{vd}$  in MPa [MN/m²] by means of the dynamic plate load test. Test results provide conclusions on the bearing capacity and compaction quality of soils.

The main field of application for LWDs is earthworks in transport infrastructure construction. Further applications are soil investigation and landscaping.

- 300 mm base plate with acceleration sensor (MEMS), max. ground pressure 0.1 MPa (MN/m²)
- · Measuring depth/depth of influence: ca. 600 mm
- Sensor housing ready for dynamic CBR and 150 mm base plate
- · Ergonomic, triangular catch handle
- All metal parts with corrosion protection and ready for use at construction sites
- Automatic calculation of deflection mean, s/v value and modulus ( $E_{\rm vd}$ ),
- Multilingual, backlit and graphics-capable display, display of deflection graphs
- Thermal printer for printing the test protocol incl.
  GPS coordinates
- Internal memory and SD-card for up to 10.000 measurements, automatic storage
- SD card USB adapter
- Sensor self-test (2G) and integrated calibration memory
- Fast charging high-current battery with short charging time including AC/DC Adaptor
- ZORN FG-WebApp (Licence)
- Quick starter manual und calibration protocol
- Detailed user manual online available





## Weather independent!

Use of the electronics case also possible in closed condition (protection against weather, dust).



ZORN INSTRUMENTS GmbH & Co. KG Benzstraße 1 | 39576 Stendal | Germany

Telefon: +49 3931 / 25 27 3-0 Telefax: +49 3931 / 25 27 3-10 eMail: info@zorn-instruments.com

Web: www.zorn-instruments.com

Catch for Transport Safety Lock

Spring Element in Bellows Tilt Protection

Centering Cone Carrying Handle Sensor Connector

Bearing Plate

Mounting Pin with Sensor