

PORTABLE AXLE WEIGHING SYSTEM

CET 10 - 4 IN STATIC MODE

TRUCKS OVERLOAD CONTROLS

EUROPEAN APPROVED

TECHNICAL OFFER

- Strain gauges load cells are approved according to the recommendations of the International Organization of Legal Metrology (OIML). Please refer to the OIML certificate n° R60 / 2000 – NL1- 04.09.
- EC type approval certificate T6377 rev 0.
- Certificates of registration for quality system n° F-06-A-800 and F-06-A-801 delivered by the L.N.E (National Laboratory of Metrology and Tests) certifying that the quality assurance system developed by CAPTELS S.A. for manufacturing process of non automatic weighing instruments (NAWI) performed on the location of St Mathieu de Tréviers and on locations where measuring instruments are installed complies with the requirements of Council Directive 90 / 384 / EEC, annex II.2
- CAPTELS S.A. is certified ISO 9001 : 2000

CAPTELS portable axle weighing system CET 10-4 SLIM functioning in Static is
composed of:

1- PLATFORM SCALES CET 10-4 SLIM:

Quantity: 2



➤ Weighing range:
20 000 kg / 20 kg per axle

➤ Accuracy when the scale is set
on a flat good quality surface.

On the total weight:

**Static weighing: + / - 0.5 % of full
scale**

Standard temperature range:

- 10°C to + 40°C

Extended temperature range:

-20° C to + 60°C

Storage temperature:

- 30 °C to + 65°C

SCALE Mechanical

- Built with aluminium high resistance alloy, avionics grade
- Protection: anti- skating polyurethane painting
- Ground force transmissions preventing slippery through the load cells accessories
- Overall dimensions: 640 x 500 x (height) 40 mm – all the surface is active
- Weigh pad weight: 24 kg

Metrology

4 stainless steel strain gauges load cells IP 67 (hermetically sealed) per platform scale connected to a junction box, transmission by cable connected with a quick release connector.

Load cells CPA SL are approved according to the Recommendation of the International Organization of Legal Metrology (OIML). Please refer to OIML certificate n° R60/2000-NL1-04.09.

2 – MEASUREMENT CABLES:

Quantity: 3 (including 1 as spare part)

To link the weigh pads to the electronics.

Length 10 m with both ends release connectors.

3 – PORTABLE ELECTRONICS WEIGHING VPR ORA 10:

Quantity: 1

They are linked to an **electronics weighing VPR ORA 10** dedicated to static mode.
The electronics VPR ORA 10 is fully equipped with:



- 1 charger + battery (internal), a link to operate from a car battery
- 1 printer with weighing data report
- Resistant case IP 68
- Dimensions: 490 x 195 x 395 mm
- Four connecting plugs for the scales
- Display: 5 digits high contrast LCD with adjustable back-lighting
- **Power supply: 8 to 17 V CC (external battery cable is provided) and 230 V AC**
- **In built battery + charger** (durability: 8 h with full load)
- **Two RS 232/ASCII serial output**
- Four connecting plugs for the scales

Functions:

- Display of axle weights
- Display of sub-total weight (axle grc)
- Display of accumulative total weigh
- Date - Time
- **Weighing range per scale: 10000 kg**
- **Weighing range for 2 scales: 20000 kg**
- Division: 20 kg
- Accuracy: 0.5 % of total weight
- Possibility to connect a laptop (provided locally) loaded with weighing and data acquisition software SAGES 2 dedicated to overload enforcement.

EEC APPROVED SEALING AND MARKING OVERVIEW – INITIAL VERIFICATION



4 - LEVELLING TRACKS in aluminium

Quantity: 4 (two for truck entry, two the exit)

Truck suspensions are a very complex network of torque compensation devices and springs.

The levelling target is to secure the trucks, and in the meantime to avoid load transfers between axles.

A flat surface is needed to get best accurate result.





5 - CALIBRATION:

CAPTELS' equipments are factory calibrated at three levels:

1 – Load cells

Individually tested and calibrated in CAPTELS® factory.

Any load cell can be replaced by a new one, no factory's return needed - no recalibration necessary (cells are standardized).

2 – Weigh pads or single scale

They are individually tested and calibrated in CAPTELS® factory.

3 – Complete System

Electronics + weigh pads are calibrated with standard weights up to 20 or 30 t.

Altitude and local gravity correction are factory adjusted.

Once the equipment is set on the site no re-calibration is needed.

Calibration: 20 t / 20 kg per axle

Weighing area: PORTUGAL

Since more than 20 years **CAPTELS®** design & manufacture accurate axle weigher, portable or fixed, developed in conjunction with the French Ministry of Transport for intensive controls. To in-cruise systems efficiency **LS-WIM** equipments have been developed using the axle weighbridge's existing range connected to a specialized A to D converter, **BRS/N smart card**. This development has been supported by the French Ministry of Industry through the ANVAR (*French National Research Valorization Agency*).

Key features:

Indisputable: rigid, insensitive to wheel position or tires pressure, **CET 10-4 SLIM** load cells weigh-pads provides full measurement reproducibility.

Traceable: dead weights factory calibrated with latitude correction allowing delivering worldwide ready to use equipments.

Accurate: operating 1000 measurements per second with algorithmic calculation the BRS/N, high speed A to D converter, collect enough weights information to reach a very high level of accuracy.

High tech but friendly: operator interfaces allow the most inexperienced user to weigh vehicles.

Dedicate: self-sufficient digital readout with built-in printer and battery or computerized solution handling database with local road & Highway Code to fulfill your application requirements.

Mobile: highly portable and quickly assembled or disassembled, equipment is really movable from site to site.

Quality: rigorous material or component's tests and selections, **CAPTELS®** stainless steel waterproof load cells, high strength aluminum alloy structure, metallic box or military quality case electronics housing EMC compliant.

Cost effective: low upkeep costs and extended life span even in harsh environments.