MEASUREMENT MODULE
“TRACK GEOMETRY“
Data sheet
Track geometry data provide a significant contribution to track and train safety. For example, they are included in the calculation of the maximal possible speed on a track. By analyzing this data, irregularities of a track can be detected, maximal possible train speeds predefined, or maintenance work initiated. Even if the inspection of the track geometry with track measuring vehicles leads to missing or invalid measuring data, Calipri can be used as a compensatory measuring device.

Calipri and the track geometry module persuade through:

- Measurement of both track rails without turning the gage around (single gage positioning)
- Direct calculation of twist (height difference)
- Multiple applications: Additional measurement modules available, e.g. rail profile measurement module
- Direct data transfer via WLAN, instead of USB stick or SD card transfer
- Flexible interfaces for data export
- Low weight
- Patented CALIPRI measurement principle

**MEASURED VARIABLES:**

TG – Track gauge  
CL - Cross level  
RC - Rail cant  
TW – Twist
**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal track width</td>
<td>1435 mm</td>
</tr>
<tr>
<td>Maximal deflection</td>
<td>12°</td>
</tr>
<tr>
<td>Net weight</td>
<td>3.3 kg</td>
</tr>
<tr>
<td>Dimensions</td>
<td>1900 x 140 x 100 mm</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Complies with the requirements of EN13848</td>
</tr>
<tr>
<td>Compatibility</td>
<td>CALIPRI C40, CALIPRI C42 as of release 2018.4.0</td>
</tr>
<tr>
<td>Product ID</td>
<td>CMM3004</td>
</tr>
</tbody>
</table>

**SCOPE OF DELIVERY:**

- Software license measurement module “Track Geometry“
  - 1 measurement method (RailGeometry)
  - By system expansion (in case of supplementary module purchase): activation via remote access

- Track geometry gage TG1435 (for regular track)¹
  - Mechanical gage for track geometry measurement
  - 14 mm (0.04 in) pin length (other pin length available upon request)
  - Delivery in hard shell case for shipping and storage

**ADD-ONS:**

- Measurement module “Rail“
  - For profile measurement of common vignole and grooved rail tracks
  - Product ID: CMM3001

- Measurement module „Equivalent Conicity“
  - To determine the running characteristics / runnability
  - Product ID: CMM1011

- GPS/LTE Expansion
  - For recording GPS data during measurement
  - Product ID: CAO3029

¹ Other gage widths available upon request.
MEASUREMENT PROCESS

APPLYING THE GAGE

MEASUREMENT OF THE LEFT RAIL PROFILE

MEASUREMENT OF THE RIGHT RAIL PROFILE

MEASUREMENT RESULT ON TABLET PC