



ELAG Elektronik AG Non-contact measurement systems

ELAG Elektronik AG has developed and supplied measurement systems worldwide since 1983, and sets the highest standards of quality.

The efficient, innovative engineering team at ELAG Elektronik AG develops and manufactures all measurement systems including sensors, mechanical systems and software applications.

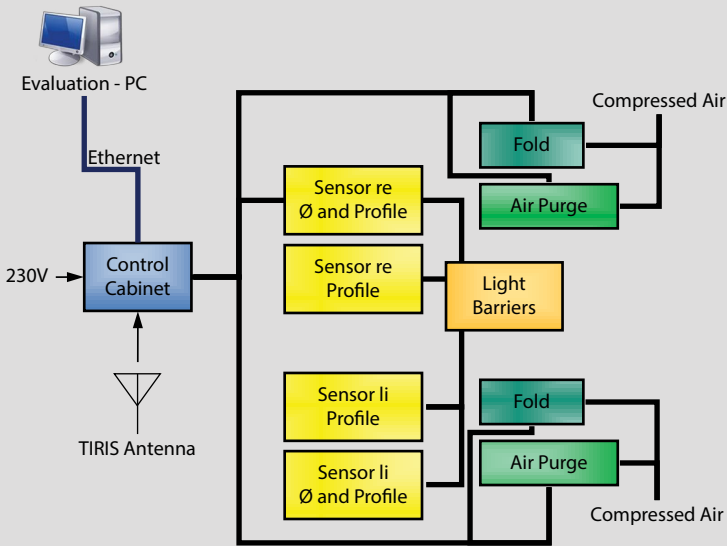
Our customers benefit from tried and tested sensors and seamlessly integrated measurement devices that combine guaranteed high precision results with simple operation.

We are committed to working in close partnership with our customers. We believe that short lines of communication are essential to implementing your requirements in line with consistently high quality standards.

This includes providing our customers with professional consultation from the sales stage to commissioning through to system maintenance.



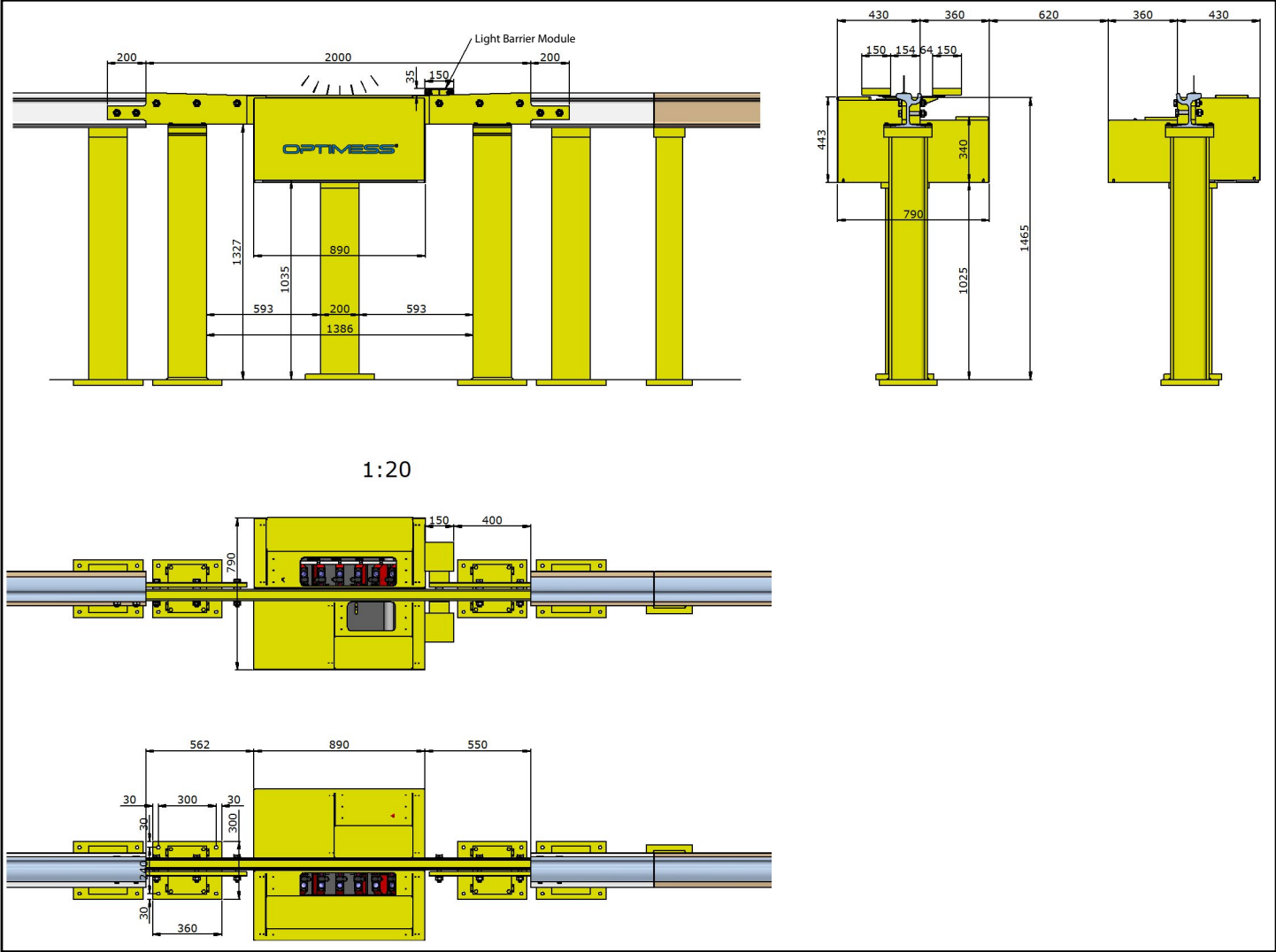
Overview Diagram



The Optimess® drive test stand is used to detect the profile and diameter of the wheels during the passage of a tram on the measuring device and consists of the following components:

- Measuring device with laser sensors, housing and protection devices
- Special track with light barriers
- Cabinet with power supply, measurement computer and RFID receiver
- RFID transponder antenna
- Evaluation Software

Tram Test Stands



Standards

With proper installation and operation the sensors comply with these European Standards:

- EN 50 081-1 (Emission)
- EN 50 082-2 (Immunity)

Optimiss sensors meet the requirements of the EU Directive EU 89/336 / EEC "Electromagnetic Compatibility"

Operating Environment:

Sensor:

- Operating Temperature: -20° – 50° C (-4° – 122° F)
- Storage Temperature: -30° – 70° C (-22° – 158° F)
- Humidity: 5% – 95% non-condensing
- Pressure: Atmospheric
- Degree of Protection: IP 65

Annex:

- Operating Temperature: -20° – 45° C (-4° – 113° F)
- Storage temperature: -20° – 60° C (-4° – 140° F)
- Humidity: 5% – 95% non-condensing
- Pressure: Atmospheric

Data Collected:

Wheel profiles

- Whole profiles graphically plotted flange masses
- Flange height
- Flange width
- Wear of wheel flange width
- Qr

Diameter

- Wheel diameter in the running circle
- Wear diameter
- Differences in diameter per axis
- Differences in diameter per bogie
- Quality of diameter measurements

Miscellaneous

- Train number, measurement time, transponder number, count of measured axes
- Transit speed of each axis
- Approximate longitudinal position of the axes
- Steering angle of each axis
- Optional: lateral position of the axis at the drive-through