

TH6I | Optical seam tracking

Optical seam tracking is suitable for automated joint seam detection, e.g., welding or gluing processes. By using three measuring lines, the component's position is detected, and the precision of the seam tracking is improved. The TH6I offers the same functions as the other seam tracking sensors in the portfolio. In addition, the sensor detects butt joints with zero gaps.

FUNCTIONAL DESCRIPTION

The robust TH6I triangulation sensor is designed for industrial use, even with highly reflective materials. The sensor scans the joint without contact and transmits the seam position, the gap size, the edge offset and the orientation of the tool relative to the component surface to the robot control.

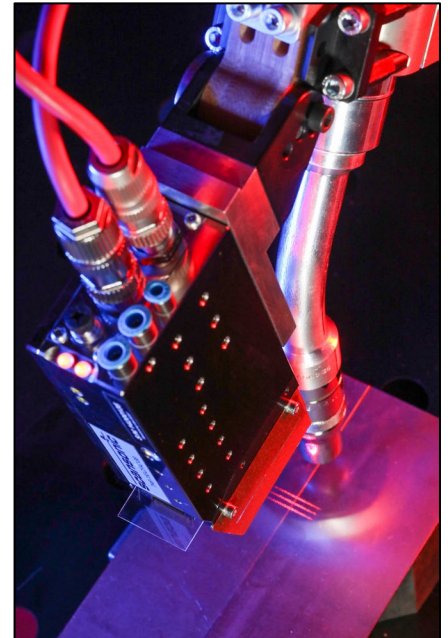
The sensor is suitable for the most demanding applications, as it is insensitive to stray light, water and dust (IP64) and immune to electromagnetic radiation (EMC).

APPLICATION AREAS AND INTERFACES

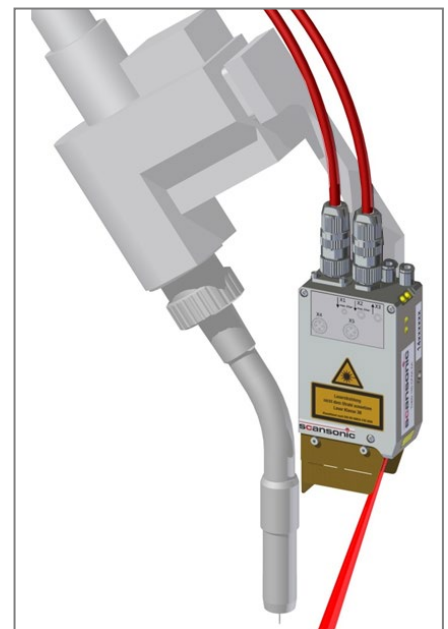
- Automates production processes such as welding, gluing, etc.
- Interfaces to all standard robot controls and portal systems are available

BENEFITS

- High process reliability through the use of the latest camera technology
- Suitable also for reflective materials such as stainless steel and aluminum
- Highly reliable measurement data capture through 3 measurement lines
- Protective glass quick-changer makes it easier to replace the protective glass
- Air cooling integrated into the sensor
- Easy to use



Triangulation sensor TH6I

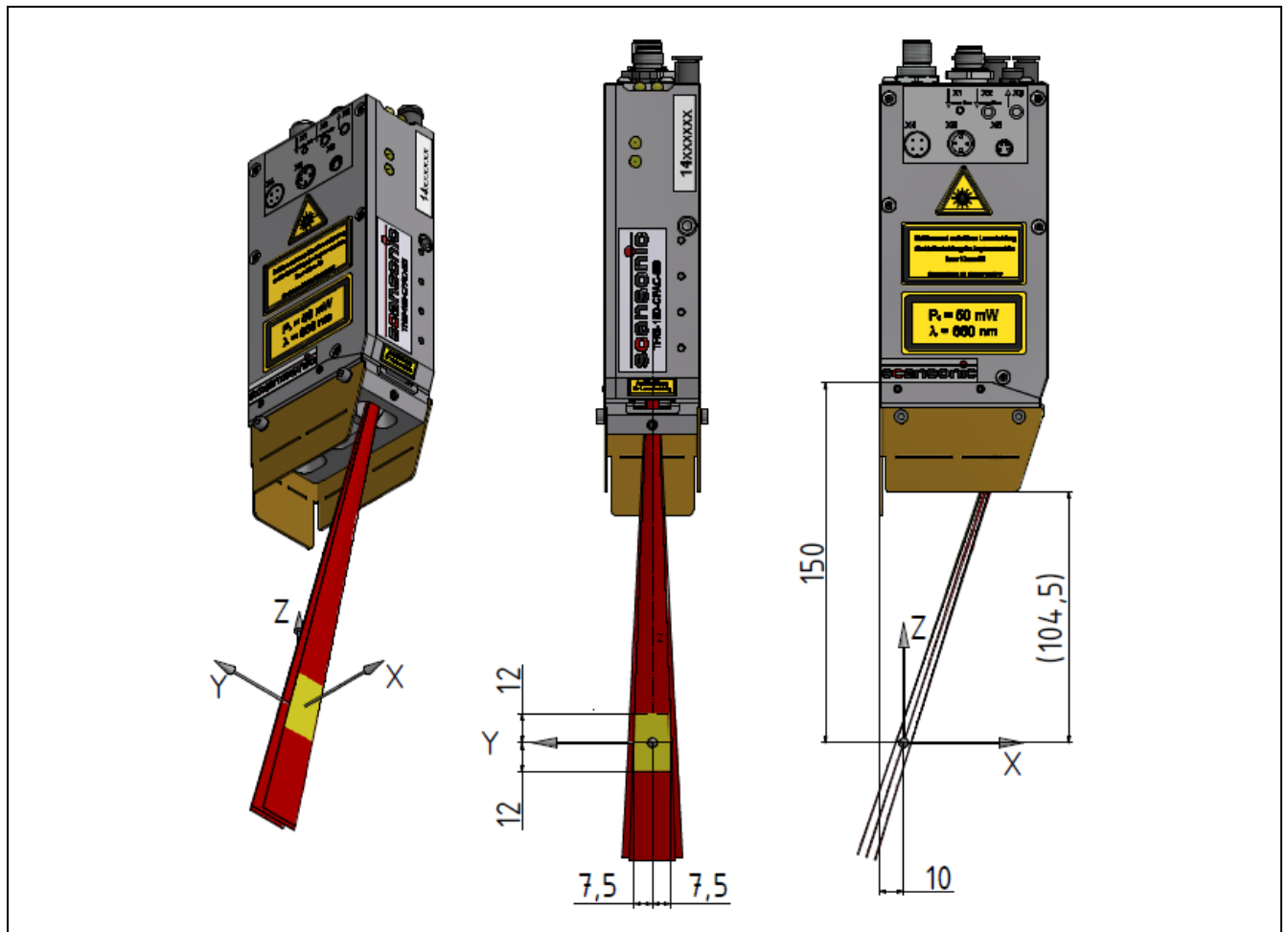


TH6I installed

TECHNICAL DATA

TH6I

Measuring lines	3
Measuring range (W x H)	15 x 24 mm
Resolution in the TCP	0.03 x 0.09 mm
Working distance	150 mm
Measuring rate	60 Hz
Operating temperature	+ 10 °C to +45 °C
Laser protection class	3B (100 mW) 3R (50 mW)
Protection rating	IP64 (with plugs inserted)
Dimensions (L x W x H)	70 x 40 x 131.5 mm
Weight	approx. 0.7 kg



Please get in touch with us for individual solutions if these features do not meet your requirements.

