



- 1 3D-Sensor.
- 2 Demonstrator for Human Machine Interaction.
- 3 Response of the System.

REALTIME 3D TRACKING FOR HUMAN MACHINE INTERACTION

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Measurement Principle

Infrared pattern projection and stereoscopic camera system for 3D tracking of dynamic objects.

Features

- Real time 3D tracking without irritation by invisible near infrared illumination
- Recognition of gestures, movements, position changes, deformations
- Control of actors (e. g. robots) with low latency by fast data processing

System Parameters

- 3D frame rate: 36 Hz
- Sensor size: 300 x 190 x 100 mm³
- Measurement field: up to 1 x 1 m²
- Latency: < 120 ms

Exemplary Applications

- 6D robot guidance
- Pick & Place solutions
- 3D robot interaction
- Assembly assistance in production areas
- Robot controlled medical technology
- Interactive training systems
- Medical applications, kinesiology, 3D rehab assistance
- Interior monitoring in vehicles

Our Offer

- Sensor hardware and software solutions for latency free real time 3D recognition of dynamic objects
- Consultation and feasibility studies in the field of human machine interaction