PEPPERL+FUCHS
SENSING YOUR NEEDS

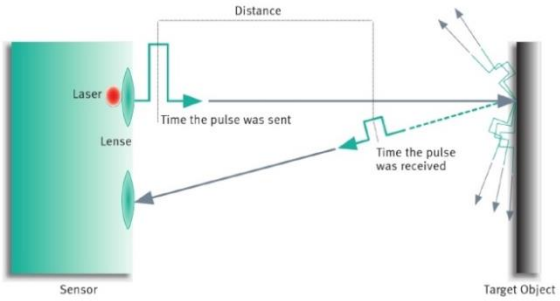
Tech SPOTLIGHT

R2000 Introduction

R2000, the 2D laser scanner from Pepperl+Fuchs, is perhaps the most celebrated and recognizable sensing product in our company's history. And with good reason – the R2000 is truly a marvel of modern engineering – combining a host of unique technologies and innovative features into a small, efficient package.

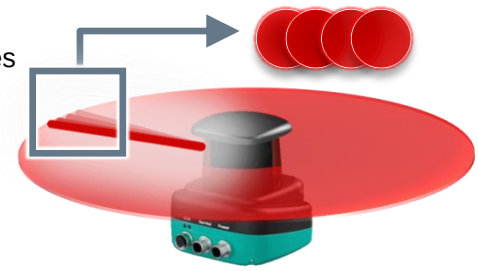
Laser Distance Measurement

- **Distance measurement with PRT**
  - ✓ True time-of-flight technology
  - ✓ Short, light pulses for high signal intensity and noise immunity
- **Sharp, pinpoint laser**
  - ✓ Detection of small objects or small reflectors
  - ✓ Eye safe, Class 1 visible red laser
  - ✓ Light spot 15x smaller than competition



360° Detection

- **Gapless, 360° field of view**
  - ✓ No unusable area – sensing elements rotated, not a mirror
  - ✓ Razor-sharp scan plane for sensing small objects in tight places
- **Unmatched measurement capability**
  - ✓ High angular resolution and position accuracy
  - ✓ Fast scan speed for rapid processes



Unique Design

- **Small, compact size**
  - ✓ Smaller than most coffee mugs!
  - ✓ Fits into extremely small spaces
- **Wrap-around LED display**
  - ✓ Provides easy-to-see status information
  - ✓ Allows the user to visualize the current application

R2000 rEvolution

Shortly after releasing the first product to bear the R2000 name (now known as **R2000 UHD**), we began to receive a tremendous amount of positive feedback as well as an unprecedented number of requests for a device that provides the same level of precision and capability as the UHD model, but with a simpler and more intuitive way for users to create detection "fields." We heard you loud and clear!

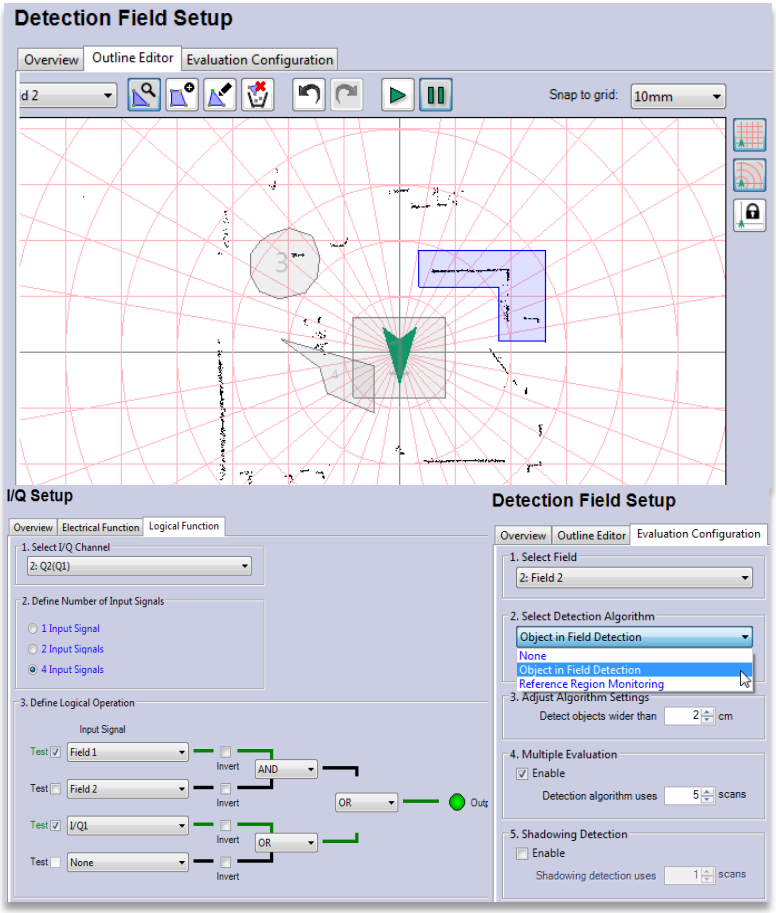
Please welcome the second product to bear the R2000 name, the **R2000 Detection**.

R2000 Detection

The R2000 Detection retains the precision and capability of the R2000 UHD but comes equipped with discrete I/O and user-configurable detection fields. Each field can be edited and assigned to a specific, discrete output with intuitive and user-friendly software. Best of all, the software is free of charge!

- **High Precision and Capability**
  - ✓ Detection of objects up to 10 m
  - ✓ Angular resolution within 0.071°
  - ✓ Scan frequency up to 30 Hz
  - ✓ Detect small objects down to 1 mm

- **Intuitive and User Friendly**
  - ✓ Draw your detection field
  - ✓ Define how the object is detected
  - ✓ Create optional logic conditions
  - ✓ Assign field(s) to output(s)

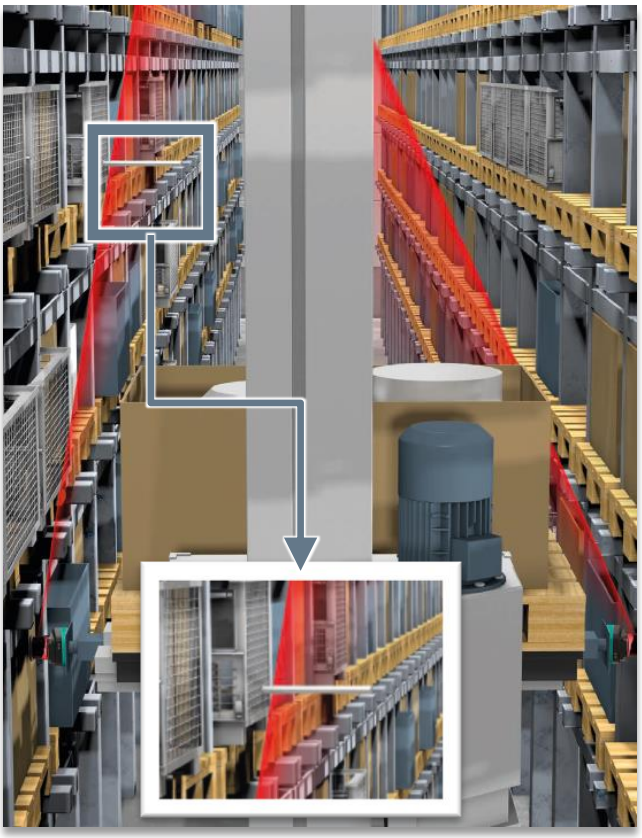


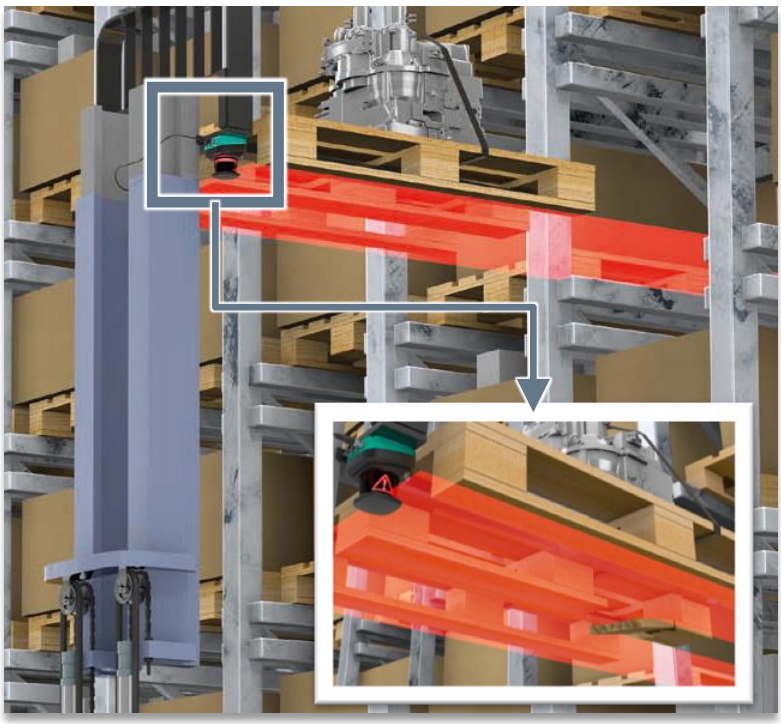
R2000 Detection	
Model number	OBD10M-R2000-4EP-V1V17
Detection range	0.2…10 m/30 m (object/reflector)
Min. object width	≥ 1 mm
Angular resolution	≥ 0.071°
Discrete I/O	4 inputs/outputs (selectable)
Number of fields	4 user defined fields
Interface	Ethernet TCP/IP (configuration and diagnostics)

Application Examples

The R2000 Detection is well-suited for use in material handling applications as well as building automation and transport management. It also offers a variety of innovative features that provide significant advantages for use in many other areas, regardless of the industry.

- **R2000 Detection Applications**
  - ✓ Detect protrusions or obstacles over large areas
  - ✓ Collision avoidance on overhead monorails
  - ✓ Detect small overhangs such as damaged pallets
  - ✓ Monitor entryways and exits
  - ✓ Height control of pallets on palletizer
  - ✓ Verify empty, full, or overfilled cartons on conveyors





For more information about R2000 2D laser scanners, please click here.
Still have questions? Contact us at Ask an Expert.