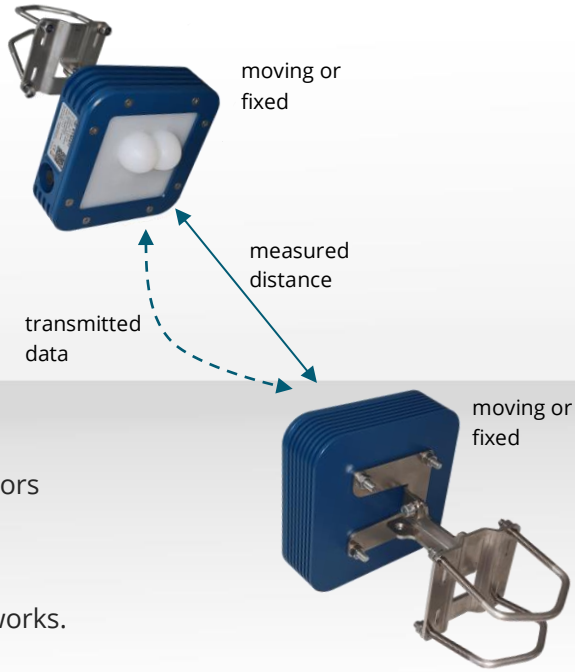
DATA SHEET

KY-LOC 1D.01.01



- Precise and reliable distance measurement between two Radar sensors to activate warning thresholds and measure distances.
- Maintenance-free indoor and outdoor operation.
- RF based, no interference with WiFi and mobile communication networks.

COLLISION AVOIDANCE ASSISTANCE SENSOR

The KY-LOC 1D.01.01 Radar is designed to measure the distance (line-of-sight) between two units to activate distance warning thresholds. The measurement is not affected by vibration or angular misalignment. Parallel to the measurement, independent user data can be transmitted wirelessly between the units. The sensors can be installed with an individual side and height offset, while they always measure the shortest line of sight between the devices.
Several integrated send/receive antennas ensure the high measurement integrity.

KY-LOC 1D.01.01 does not require/allocate any WiFi or mobile communication frequencies and is also not affected by such radio signals.

TECHNICAL DATA: KY-LOC 1D.01.01	
Detection range[1)]; Measurement range[1)]	2m ≤ x ≤ 400 m; 2m ≤ x ≤ 100 m
Repeat accuracy of measurement[1)]	typ. ± 0,5 m
Absolute distance accuracy[1)]	typ. ± 0,5 m
Update rate	up to 20 Hz (single side data connection)
User data transfer parallel to measurement	up to 1 kbit/s
Protection	IP 66, IP66k and IP68 (cntd. plugs, 24h@1m)
Operating temperature	-30 … +75 °C; -22 … 167 F
Weight, dimensions LxWxD	1060 g; 138x138x43mm (without support bracket)
Voltage, power consumption (M12, 5 pin, male, A-coded)	9 … 36 V DC or PoE (802.3af), 5 W
Frequency band	61 GHz (ISM band)
Interface (M12, 8 pin, female, X-coded)	Ethernet (100Base-Tx), PoE (802.3af)

1) Values may vary with radio regulations applicable

KY-LOC 1D.01.01- Quick Facts

- Cost effective collision warning devices for any type of moving equipment (e.g., cranes, transfer cars).
- Easy to install, mounting bracket included.
- To be used as assistance system, not as single safety device if personal injuries could be possible.
- No precise horizontal or vertical alignment required.
- Parallel wireless user data transmission without the use of WiFi.
- Highly reliable under adverse weather conditions, dust, and dirt.
- User-defined preset distance warnings.
- No interference with WiFI or 5G.
- Multiple KY-LOC pairs can operate in parallel using different channel settings.
- Maintenance-free.

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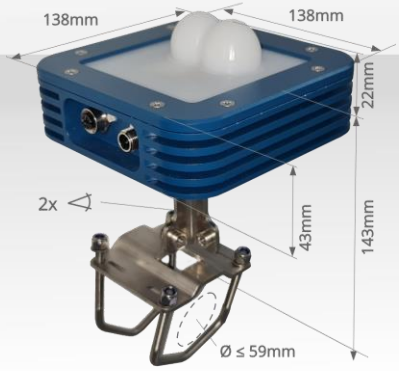
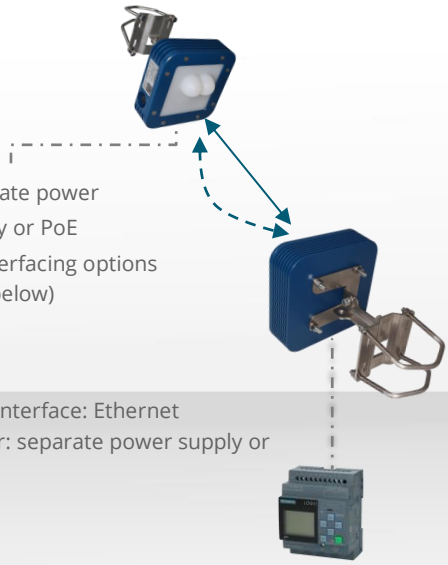


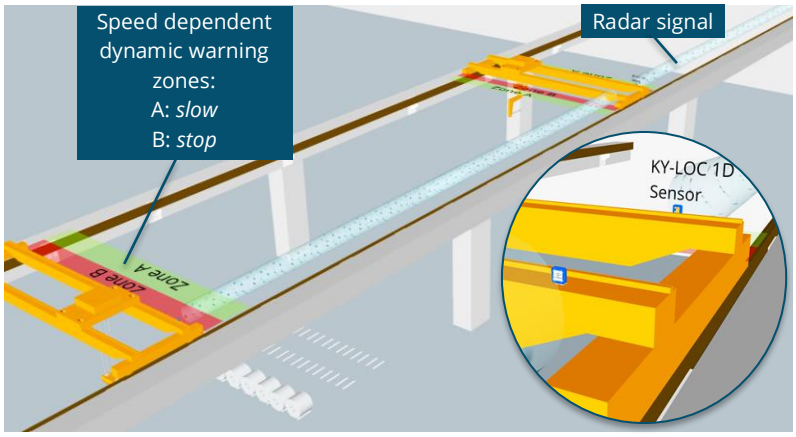
Mechanical Interface

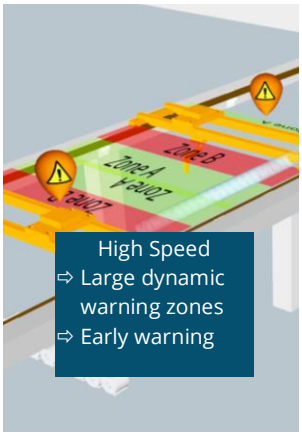


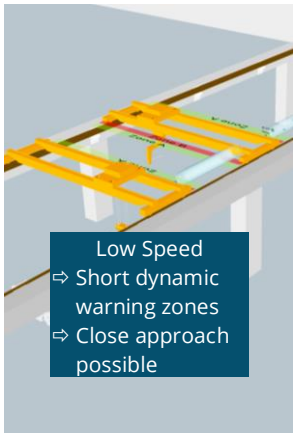
Electrical Interface

- Separate power supply or PoE
- All interfacing options (see below)
- Data interface: Ethernet
- Power: separate power supply or PoE
- Output signal module KY-XTRA B.10.01 with digital output signals based on defined distance warning thresholds

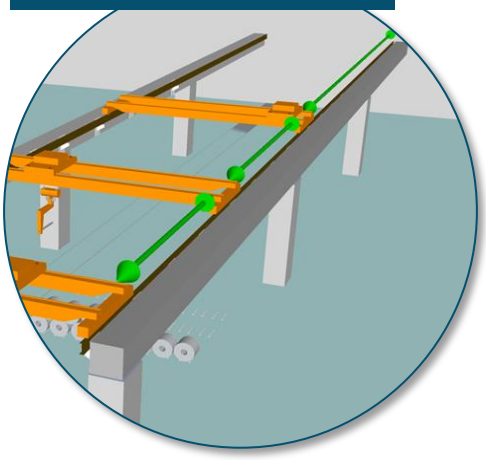
APPLICATION EXAMPLES





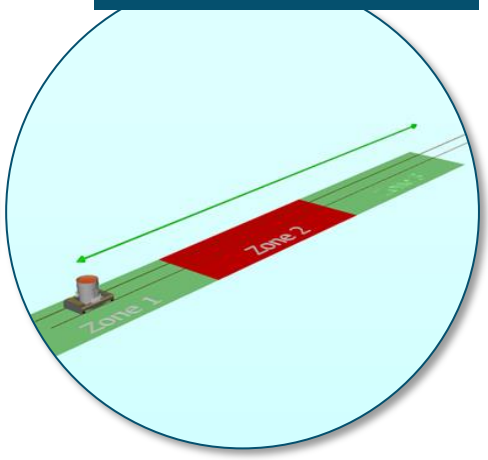


CRANES
- Collision avoidance
- No-go zones
- X-Y-Z axis motion control



FREE RANGING OBJECTS
- Rubber tyre gantries
- Not depending on straight alignment of relative mounting positions

MACHINE ZONE CONTROL
- Any moving machine
- Control zone entry/exit
- Multiple machines/zones



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