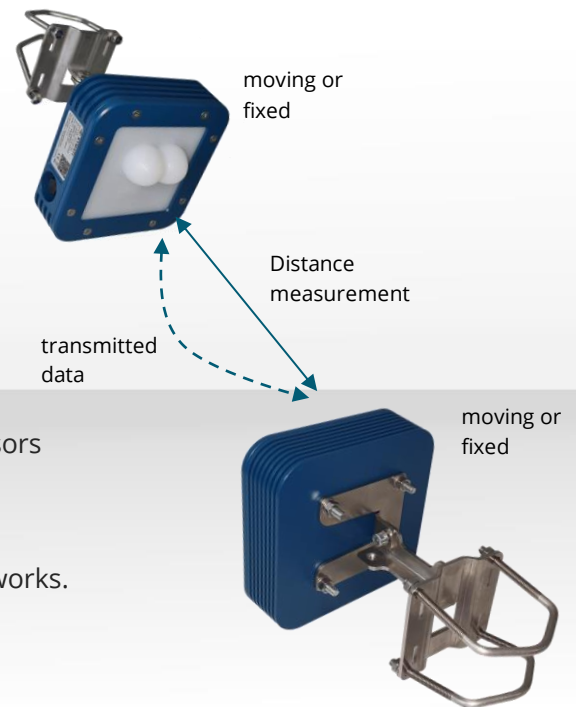


# DATA SHEET

## KY-LOC 1D.02.02



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

## DISTANCE MEASUREMENT

The KY-LOC 1D.02.02 Radar is designed to measure the precise distance (line-of-sight) between two units. The measurement is resistant to vibration or challenging conditions such as fog, rain, snow, dust or dirt. Parallel to the measurement, independent user data can be transmitted wirelessly between the units. The units always measure the shortest distance (line-of-sight) between them.

The integrated, separated antennas for sending and receiving ensure the high measurement integrity.

KY-LOC 1D.02.02 does not require/allocate any WiFi or mobile communication frequencies and is also not affected by such radio signals.

### TECHNICAL DATA: KY-LOC 1D.02.02

Measurement range <sup>1)</sup>	2m ≤ x ≤ 250 m
Repeat accuracy of measurement <sup>1)</sup>	up to ± 3 mm
Absolute distance accuracy <sup>1)</sup>	up to ± 5 mm
Update rate	up to 20 Hz
User data transfer parallel to measurement	up to 1 kbit/s
Protection	IP 66, IP66k and IP68 (cntd. plugs, 24h@1 m)
Operating temperature	-30 ... +75 °C; -22 ... 167 F
Weight, dimensions LxWxD	1060 g; 138x138x43mm (without support)
Voltage, power consumption (M12, 5 pin, male, A-coded)	9 ... 36 V DC or PoE (802.3af), 5 W
Frequency	60 GHz band
Interface (M12, 8 pin, female, X-coded)	Ethernet (100Base-Tx), PoE (802.3af)

<sup>1)</sup> Values may vary with radio regulations applicable

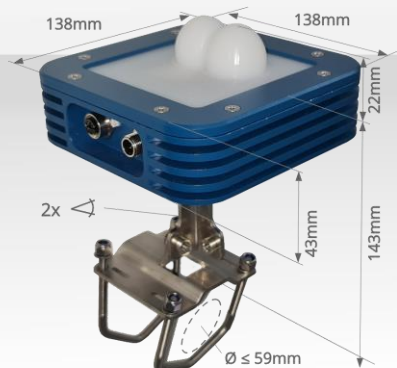
### KY-LOC 1D.02.02- Quick Facts

- High frequency radio positioning.
- Easy to install, adjustable mounting bracket included.
- Parallel wireless user data transmission without the use of WiFi.
- Highly reliable under adverse weather conditions, dust, and dirt.
- Can be used as assistant collision warning sensor with preset distance warning thresholds.
- No interference with WiFi or mobile communication.
- Multiple KY-LOC pairs can operate in parallel using different channel settings.
- Maintenance-free.

# DATA SHEET

## KY-LOC 1D.02.02

### Mechanical Interface



### Electrical Interface

- Separate power supply or PoE
- All interfacing options (see below)

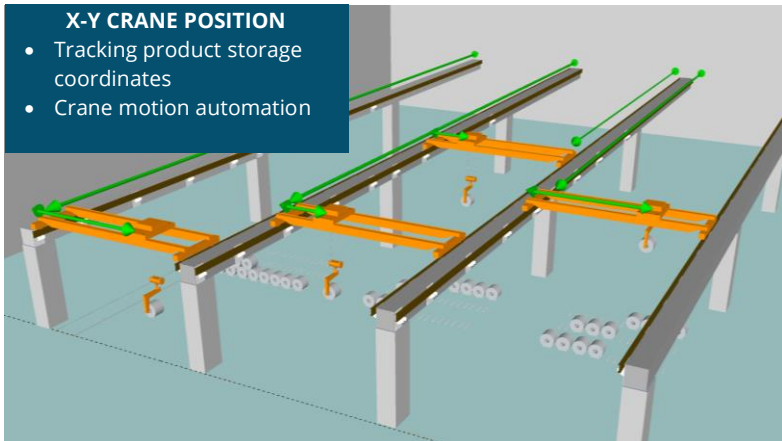
- Data interface: Ethernet
- Power: separate power supply or PoE

- Output signal module KY-XTRA B.10.01 with digital output signals based on defined distance warning thresholds
- Interface converter KY-XTRA B.01.01 enabling: Profibus, Profinet, Ethernet IP, Modbus, CAN

## APPLICATION EXAMPLES

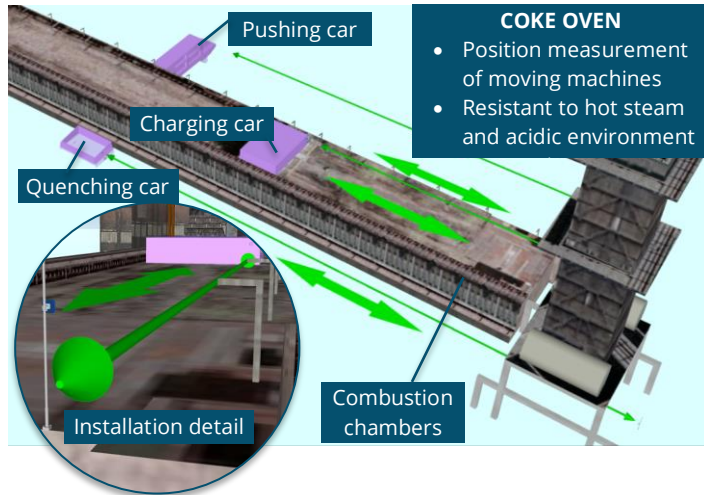
### X-Y CRANE POSITION

- Tracking product storage coordinates
- Crane motion automation



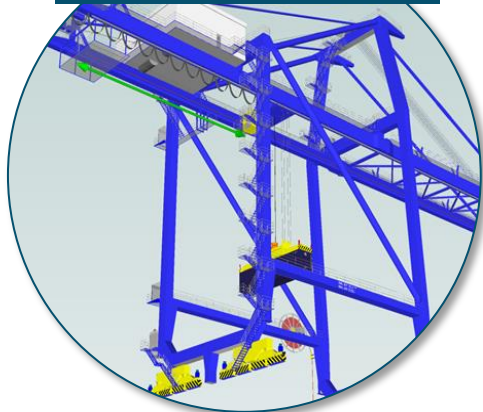
### COKE OVEN

- Position measurement of moving machines
- Resistant to hot steam and acidic environment



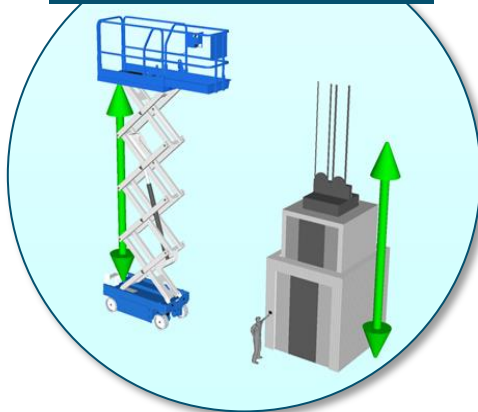
### CONTAINER CRANES

- Trolley position
- Independent from drive unit steel rope lengthening



### LIFTING EQUIPMENT

- Cabin / platform height
- Not depending on mechanical wear or deformation



### SKEWING AVOIDANCE

- Gantry cranes and other equipment
- OEM and retrofit for all existing machines

