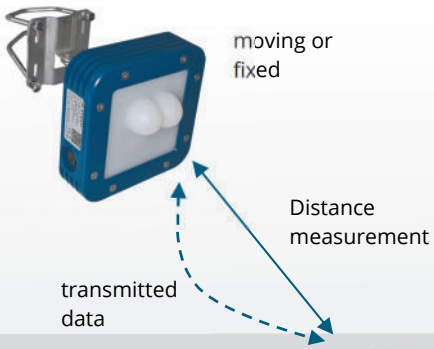
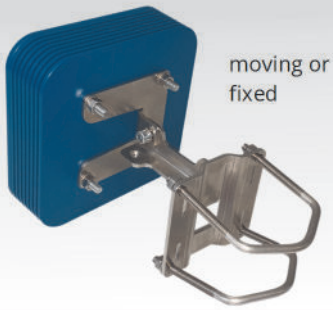
DATA SHEET

KY-LOC 1D.02.01



- 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.



RADAR DISTANCE MEASUREMENT

The KY-LOC 1D.02.01 Radar is designed to measure the distance (line-of-sight) between two units. The measurement is resistant to 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 measurement integrity.

KY-LOC 1D.02.01 does not require/allocate any WiFi or mobile communication frequencies and is also not affected by such radio signals.

TECHNICAL DATA: KY-LOC 1D.02.01	
Measurement range[1)]	2m ≤ x ≤ 500 m
Repeat accuracy of measurement[1)]	up to 15 mm
Absolute distance accuracy[1)]	up to 50 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@1m)
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	61 GHz (ISM band)
Interface (M12, 8 pin, female, X-coded)	Ethernet (100Base-Tx), PoE (802.3af)

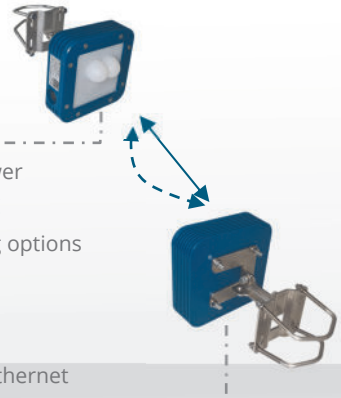
1) Values may vary with radio regulations applicable

KY-LOC 1D.02.01- Quick Facts

- High frequency radio measurement.
- Easy to install, adjustable mounting bracket included.
- 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.
- No interference with WiFI or mobile communication.
- Multiple KY-LOC pairs can operate in parallel using different channel settings.
- Maintenance-free.

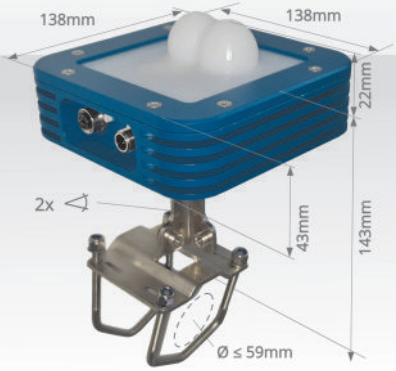
DATA SHEET

KY-LOC 1D.02.01



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

Mechanical Interface



Electrical Interface

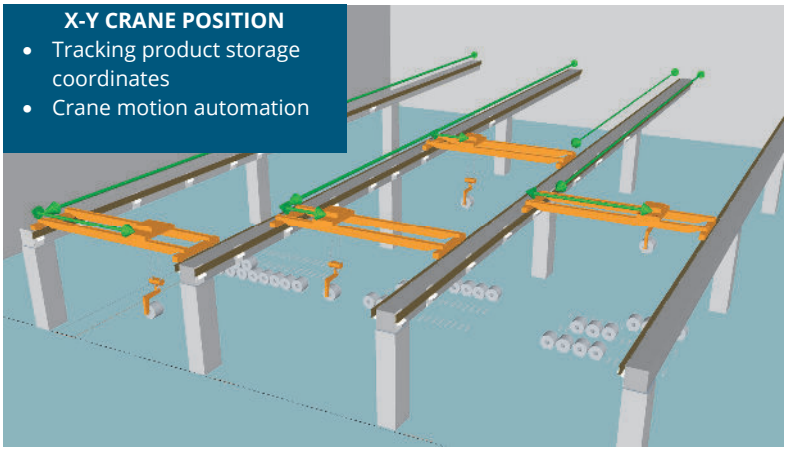
- Data interface: Ethernet
- Power: separate power supply or PoE

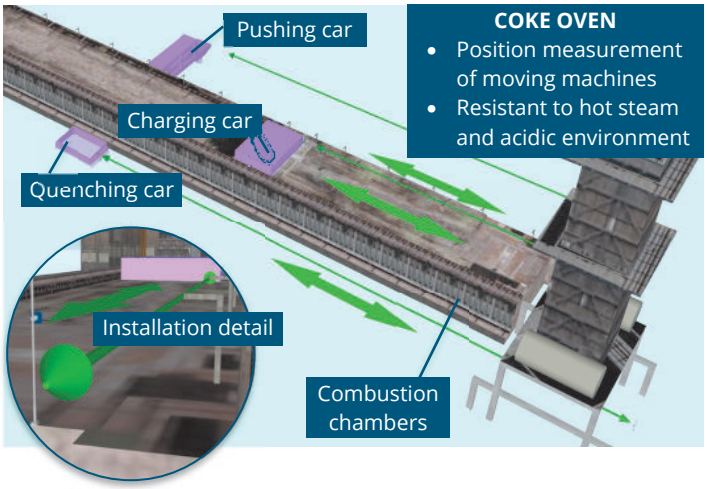
- Output signal module KY-XTRA B.10.01 with digital output signals based on defined distance warning thresholds

- 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

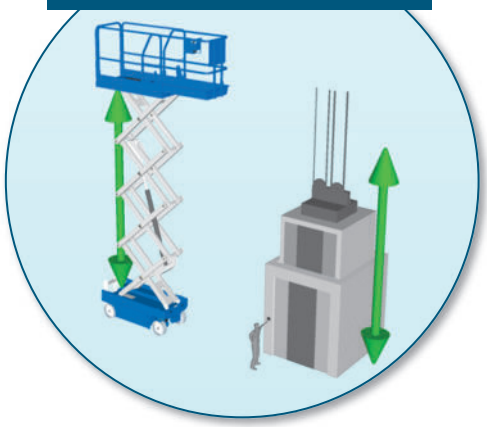




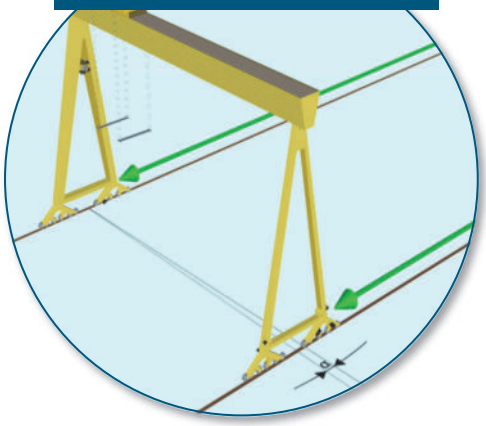
COKE OVEN
- Position measurement of moving machines
- Resistant to hot steam and acidic environment

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



www.kymati.com, +49 89 515 759 900

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