

### **x** MRX.camera, zoom, 2MP

Digital IP camera with 2MP and 26x optical zoom

- x Low weight**
- x Resolution 2MP (1920x1080); 30fps**
- x 26x optical zoom, 16x digital zoom**
- x Operational even with very low light intensity**
- x Integrated lens heater**
- x IP66 protected**



The MRX.camera digital zoom camera, specially developed for the MRX.crane radio system, is designed for robust outdoor use. Thanks to its weatherproof and vibration-resistant housing, it is ideal for mounting on construction machinery and in harsh environments.

MRX.camera offers high-resolution image quality with optical zoom, enabling precise visual monitoring even from a great distance. Power is conveniently supplied via Power-over-Ethernet (PoE), which enables easy integration into existing networks and reduces installation costs.

### **Introduction**

MRX.CraneRadio is a radio-based transmission system for all types of construction machinery. Originally designed to transmit video streams from analog and digital cameras into the crane operator's cab, it is suitable for the bidirectional transmission of many different data signals.

The system is based on AZG.mesh technology, which enables a very robust and encrypted network. AZG.mesh makes it possible to connect several nodes in a network to enable different use cases. AZG.mesh allows data to be transmitted via several stations (repeaters), creating redundancies and overcoming possible radio shadows.

The powerful nodes ensure that the video data is transmitted and processed with very low latency. This means that the crane operator always has a live image in the driver's cab.

The individual encryption of MRX.CraneRadio

ensures that the systems on different cranes working on the same construction site can neither interfere with nor influence each other. This prevents camera images from being incorrectly transmitted to the wrong driver's cab.

Radio transmission is carried out using modern digital technology in accordance with IEEE 802.11s with 2x2 MIMO antenna technology. This enables a long range with a large transmission bandwidth.

A wide range of accessories, including a digital zoom camera and a smart battery with various charging options, round off the system.

## Technical Specifications

### General

- Image sensor: 1/2.8" CMOS
- FullHD resolution: 1920x1080
- Automatic day/night shift

### Lens

- Focus: 5-130mm
  - ↳ 26x optical zoom
  - ↳ 16x digital zoom
  - ↳ Opening angle: 57-2.9°

### Video stream

- Compression
  - ↳ H.265 / H.264 / MJPEG
  - ↳ Bit rate: 32kbps..16Mbps
  - ↳ Multiple streams can be accessed in parallel
- Properties
  - ↳ Auto focus
  - ↳ Image stabilisation
  - ↳ Automatic day/night shift
  - ↳ Control: ONVIF
- Smart features
  - ↳ Area intrusion detection
  - ↳ Fast motion detection
  - ↳ Personnel gathering detection
  - ↳ False focus detection

### Housing

- Connections
  - ↳ 1x 10/100BaseT w/ PoE
  - ↳ 3.0m connection cable w/ M16 plug, X code, male
- Mechanics
  - ↳ 120x120x200mm (WxHxD)
  - ↳ Weight: 1,5kg
  - ↳ Protection class: IP66
  - ↳ Colour:black

### Power consumption

- Power
  - ↳ pPoE (12-36VDC)
  - ↳ PoE IEEE802.3af
  - ↳ 2.5W (w/o heater)
  - ↳ 7.5W (w/ heater)

### Environment

- Ambient conditions
  - ↳ outdoor
  - ↳ Operation: -30..+70°C
  - ↳ Storage: 0 .. +40 °C
  - ↳ Rel. humidity: 20-90%, non-cond.
  - ↳ internal heater for lens

### Certifications

- ↳ CE, eMark regulations
- ↳ RoHS, REACH
- ↳ FCC

### Pin assignment

