

## WIRELESS ETHERNET - DATAEAGLE 4000 Your benefits

The DATAEAGLE 4000 series was particularly designed for transparent data transmission of Ethernet using various radio technologies. The patented technology guarantees a highly available and reliable radio connection without radio interruptions and prevents system downtimes. Read our white paper "Wireless 101" to learn more about our patented wireless technology.

- Patented filter technology
- Optimized for Ethernet, PROFINET \& PROFIsafe, EtherNet/IP \& CIPSafety, openSAFETY via UDP
- Plug and Play - No device and controller configuration required
- Up to 3000m range


## BLUETOOTH 5 IN DATAEAGLE 473x Very fast data transmission via radio

The use of modern Bluetooth 5 wireless technology in the DATAEAGLE 473x enables the highest requirements in terms of speed and latency. This makes the DATAEAGLE $473 x$ is particularly suitable for high-performance and safety applications.

- 2 times faster data transmission with minimal latency
o State-of-the-art safety through 128 bit AES encryption


## APPLICATION EXAMPLES <br> Versatile

We have been successfully equipping industrial plants with our radio data transmission system for over 40 years. On our website you will find numerous practical examples and an overview of our industry sectors with reports about wireless solutions.

- Substitute of conductor lines
- Substitute of trailing cables and cable chains
o Substitute of optical data transceivers
- Crane systems
- Warehouse systems
- Automotive industry
- Transport vehicles
- Water, wastewater, waste and raw material management
o Engineering
- Lifts, inclined lifts and cable cars
- Oil and gas industry
- Steel and cement plants
- Stage technology


## WIRELESS ETHERNET - DATAEAGLE 4000 Differences at a glance

| Product | Frequency | Typical Distance* | Integrated <br> Switch | Protection class | Region |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Compact 473x | $2,4 \mathrm{GHz}$ <br> Bluetooth 5 | 300 m | Yes | IP20 | Worldwide |
| X-treme 473x | $2,4 \mathrm{GHz}$ <br> Bluetooth 5 | 300 m | No | IP65 | Worldwide |
| Compact 4333 | 869 MHz | 1000 m | Yes | IP20 | Europe |
| X-treme 4333 | 869 MHz | 1000 m | No | IP65 | Europe |
| Compact 4343 | 915 MHz | 1000 m | Yes | IP20 | America |
| X-treme 4343 | 915 MHz | 1000 m | No | IP65 | America |

* Note on typical distance for data radio systems

The range of a radio data transmission solution depends on the quality and type of antennas. Depending on the choice of antenna, the range of the radio solution can therefore vary. With a directional antenna, the typical distance of 300 meters can be significantly increased. Contact us for personal advice or download the white paper on antennas.


## ORDERING BLUETOOTH 5

## Select the basic device, interface and set configuration

Various interface options are available for the DATAEAGLE devices with Bluetooth 5. When ordering, the order number of the basic device, the interface option and the set configuration must be specified. The set configuration enables the Plug \& Play functionality of the radio link.

Ordering example:
A radio link with 2 users for PROFIsafe via PROFINET and basic device for control cabinet mounting. $3 \times 15475$ - DATAEAGLE Compact 473x (basic devices)
$3 \times 15483$ - Interface PROFINET (interface option for 1 master and 2 slaves)
$1 \times 10003$ - Configuration Master/Slave (Set configuration for Plug \& Play)

| Step 1 - Select basic device |  |  |  |
| :---: | :---: | :---: | :---: |
| Order number |  | Basic device |  |
| 15475 |  | DATAEAGLE Compact 473x |  |
| 15476 |  | DATAEAGLE X-treme 473 x |  |
| Step 2 - Select interface options (PROFINET IRT is not supported) |  |  |  |
| Order number | Interface |  | Link |
| 15480 | ETHERNET |  | Multipoint 1-4 |
| 15481 | PROFINET, EtherNet/IP |  | Point-to-Point |
| 15482 | PROFINET, EtherNet/IP |  | Multiprotocol, Multipoint 1-4 |
| 15483 | EtherNet/IP, Safety, PROFIsafe, openSAFETY |  | Multiprotocol, Multipoint 1-4 |
| 15485 | EtherNet/IP, Safety, PROFIsafe, openSAFETY, CIP Safety |  | Point-to-Point |
| $\downarrow$ |  |  |  |
| Step 3 - Select set configuration for Plug \& Play |  |  |  |
| Order number | Participant |  | Number of masters and slaves |
| 10002 | 1-1 |  | 1 Master, 1 Slave |
| 10003 | 1-2 |  | 1 Master, 2 Slaves |
| 10004 | 1-3 |  | 1 Master, 3 Slaves |
| 10005 | 1-4 |  | 1 Master, 4 Slaves |

## DATAEAGLE COMPACT 473x

Technical data

- GENERAL

| Voltage supply | 24 V DC |
| :--- | :--- |
| Connection Voltage supply | Terminal clamps |
| Power consumption | 150 mA |
| Fixing | DIN rail mounting |
| Protection class | IP20 |
| Temperature range | $-20 . .+60{ }^{\circ} \mathrm{C}$ |
| Conformity | $\mathrm{CE}, \mathrm{FCC}$, IC |
| Weight | 130 g |
| Width | $22,5 \mathrm{~mm}$ |
| Height | 99 mm |
| Depth | $114,5 \mathrm{~mm}$ |
| Color | Black |

- RADIO TECHNOLOGY

| Frequency | $2,4 \mathrm{GHz}$ Bluetooth 5 |
| :--- | :--- |
| Transmitting power | 8 dBm |
| Max. Number radio slaves | 4 |
| Range indoor | 100 m |
| Range outdoor | 300 m |
| Antenna connection | SMA Connection - 50 Ohm |

- INTERFACE

| Max. Ethernet transmission rate | 100 Mbit |
| :--- | :--- |
| 2-port Switch | Yes |
| Ethernet connection | RJ 45 |

- Here you find all informations about antennas and accessories
- Go back to product overview


## DATAEAGLE COMPACT 473x

## Technical data

| Connection | Ethernet Multipoint |
| :---: | :---: |
| Optimized for | Ethernet |
| Max. Number of radio slaves | 4 |
| Order number | 15480 |
| Connection | Multiprotocol, Point-to-Point |
| Optimized for | PROFINET, EtherNet/IP |
| Max. Number of radio slaves | 1 |
| Max. Number of devices | 4 |
| Safety communication | No |
| Order number | 15481 |
| Connection | Multiprotocol Multipoint |
| Optimized for | PROFINET, EtherNet/IP |
| Max. Number of radio slaves | 4 |
| Max. Number of devices | 6 |
| Safety communication | No |
| Order number | 15482 |
| Connection | Multiprotocol Safe, Point-to-Point |
| Optimized for | PROFINET, EtherNet/IP, openSafety via UDP |
| Max. Number of radio slaves | 1 |
| Max. Number of devices | 4 |
| Safety communication | Yes |
| Order number | 15485 |


| Connection | Multiprotocol Safe, Multipoint |
| :--- | :--- |
| Optimized for | PROFINET, EtherNet/IP, openSafety via UDP |
| Max. Number of radio slaves | 4 |
| Max. Number of devices | 8 |
| Safety communication | Yes |
| Order number | 15483 |
|  |  |
| ORDERING PROCESS | Please select here (page 4) |

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## DATAEAGLE X-TREME 473x

 Technical data

| Voltage supply | 24 V DC |
| :---: | :---: |
| Connection Voltage supply | M12, A-coded, 5 pin |
| Power consumption | 100 mA |
| Fixing | 4-hole screw fastening |
| Protection class | IP65 |
| Temperature range | $-20 . . .60^{\circ} \mathrm{C}$ |
| Conformity | CE, FCC, IC |
| Weight | 280 g |
| Width | 88 mm |
| Height | 120 mm |
| Depth | 42 mm |
| Color | Black |
| - RADIO TECHNOLOGY |  |
| Frequency | 2,4 GHz Bluetooth 5 |
| Transmitting power | 8 dBm |
| Range indoor | 100 m |
| Range outdoor | 300 m |
| Antenna connection | SMA Connection - 50 Ohm |
| - INTERFACE |  |
| Max. Ethernet transmission rate | 100 Mbit |
| 2-port Switch | No |
| Ethernet connection | M12, B-coded |

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EtherNet/IPP PMRPFT


## DATAEAGLE X-TREME 473x

Technical data


- INTERFACE OPTIONS

| Connection | Ethernet Multipoint |
| :--- | :--- |
| Optimized for | Ethernet |
| Max. Number of radio slaves | 4 |
| Order number | 15480 |


| Connection | Multiprotocol, Point-to-Point |
| :--- | :--- |
| Optimized for | PROFINET, EtherNet/IP |
| Max. Number of radio slaves | 1 |
| Max. Number of devices | 4 |
| Safety communication | No |
| Order number | 15481 |


| Connection | Multiprotocol Multipoint |
| :--- | :--- |
| Optimized for | PROFINET, EtherNet/IP |
| Max. Number of radio slaves | 4 |
| Max. Number of devices | 6 |
| Safety communication | No |
| Order number | 15482 |


| Connection | Multiprotocol Safe, Point-to-Point |
| :--- | :--- |
| Optimized for | PROFINET, EtherNet/IP, openSafety via UDP |
| Max. Number of radio slaves | 1 |
| Max. Number of devices | 4 |
| Safety communication | Yes |
| Order number | 15485 |


| Connection | Multiprotocol Safe, Multipoint |
| :--- | :--- |
| Optimized for | PROFINET, EtherNet/IP, openSafety via UDP |
| Max. Number of radio slaves | 4 |
| Max. Number of devices | 8 |
| Safety communication | Yes |
| Order number | 15483 |
|  |  |
| ORDERING PROCESS | Please select here (page 4) |

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## DATAEAGLE COMPACT 4333

Technical data

## - GENERAL

| Voltage supply | 24 V DC |
| :--- | :--- |
| Connection Voltage supply | Terminal clamps |
| Power consumption | 100 mA |
| Fixing | DIN rail mounting |
| Protection class | IP20 |
| Temperature range | $-20 \ldots+60^{\circ} \mathrm{C}$ |
| Conformity | CE |
| Weight | 160 g |
| Width | $22,5 \mathrm{~mm}$ |
| Height | 99 mm |
| Depth | $114,5 \mathrm{~mm}$ |
| Color | Black |


| RADIO TECHNOLOGY |  |
| :--- | :--- |
| Frequency | 869 MHz |
| Transmitting power | $500 \mathrm{~mW}($ EIRP $)$ |
| Max. Number of radio slaves | 4 |
| Range indoor | 100 m |
| Range outdoor | $1000-3000 \mathrm{~m}$ |
| Antenna connection | SMA Connection - 50 Ohm |

- INTERFACE

Max. Ethernet transmission rate 100 Mbit
2-port Switch Yes
Ethernet connection RJ 45
Optimized for
PROFINET
Max. Number of PROFINET devices 6
PROFIsafe Nein

- ORDER NUMBER

DATAEAGLE Compact 4333
11144

## DATAEAGLE X-TREME 4333

Technical data


- GENERAL

| Voltage supply | 24 V DC |
| :--- | :--- |
| Connection Voltage supply | M12, A-coded |
| Power consumption | 100 mA |
| Fixing | 4 -hole screw mounting |
| Protection class | IP 65 |
| Temperature range | $-20 \ldots+60^{\circ} \mathrm{C}$ |
| Conformity | CE |
| Weight | 280 g |
| Width | 88 mm |
| Height | 120 mm |
| Depth | 42 mm |
| Color | Black |


| RADIO TECHNOLOGY |  |
| :--- | :--- |
| Frequency | 869 MHz |
| Transmitting power | 500 mW (EIRP) |
| Max. Number radio slaves | 4 |
| Range indoor | 300 m |
| Range outdoor | $1000-3000 \mathrm{~m}$ |
| Antenna connection | SMA connector (female) -50 Ohm |

- INTERFACE

Max. Ethernet transmission rate 100 Mbps
2-port Switch No
Ethernet connection M12, B-coded
Optimized for
PROFINET
Max. Number PROFINET devices 6
PROFIsafe No

- ORDER NUMBER

DATAEAGLE X-treme 4333
11372

- Here you find all informations about antennas and accessories
- Go back to product overview


## DATAEAGLE COMPACT 4343

Technical data

| GENERAL |  |
| :--- | :--- |
| Voltage supply | 24 V DC |
| Connection Voltage supply | Terminal clamps |
| Power consumption | 100 mA |
| Fixing | DIN rail mounting |
| Protection class | IP20 |
| Temperature range | $-20 . .+60^{\circ} \mathrm{C}$ |
| Conformity | FCC |
| Weight | 160 g |
| Width | $22,5 \mathrm{~mm}$ |
| Height | 99 mm |
| Depth | $114,5 \mathrm{~mm}$ |
| Color | Black |

- RADIO TECHNOLOGY

| Frequency | 915 MHz |
| :--- | :--- |
| Transmitting power | 500 mW (EIRP) |
| Max. Number of radio slaves | 4 |
| Range indoor | 100 m |
| Range outdoor | $1000-3000 \mathrm{~m}$ |
| Antenna connection | SMA Connection - 50 Ohm |

- INTERFACE

Max. Ethernet transmission rate 100 Mbit
2-port Switch Yes
Ethernet connection RJ 45
Optimized for PROFINET

Max. Number of PROFINET devices 6
PROFIsafe Nein

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- ORDER NUMBER
DATAEAGLE Compact 4343
11158
```


## DATAEAGLE X－TREME 4343

Technical data


| GENERAL |  |
| :--- | :--- |
| Voltage supply | 24 V DC |
| Connection Voltage supply | M12，A－coded |
| Power consumption | 100 mA |
| Fixing | 4 －hole screw mounting |
| Protection class | IP65 |
| Temperature range | $-20 \ldots+60^{\circ} \mathrm{C}$ |
| Conformity | FCC |
| Weight | 280 g |
| Width | 88 mm |
| Height | 120 mm |
| Depth | 42 mm |
| Color | Black |


| －RADIO TECHNOLOGY |  |
| :--- | :--- |
| Frequency | 915 MHz |
| Transmitting power | 500 mW （EIRP） |
| Max．Number radio slaves | 4 |
| Range indoor | 300 m |
| Range outdoor | $1000-3000 \mathrm{~m}$ |
| Antenna connection | SMA connector（female）-50 Ohm |

－INTERFACE
Max．Ethernet transmission rate 100 Mbps
2－port Switch No
Ethernet connection M12，B－coded
Optimized for PROFINET
Max．Number PROFINET devices 6
PROFIsafe No

```
－ORDER NUMBER
DATAEAGLE X－treme 4343
11374
```

－Here you find all informations about antennas and accessories
－Go back to product overview

