



**PROFI<sup>®</sup>**  
**BUS**

**SCHILDKNECHT**  
SMART DATA COMMUNICATION

 **Bluetooth<sup>™</sup> 5**



**DATAEAGLE<sup>®</sup> 3000**  
WIRELESS PROFIBUS





# WIRELESS PROFIBUS - DATAEAGLE 3000

## Your benefits

The [DATAEAGLE 3000](#) series was particularly designed for transparent data transmission of PROFIBUS DP applying various radio technologies. All devices featuring a PROFIBUS DP interface may be connected via radio. Our patented filter technology guarantees a highly available and reliable radio connection. [Read our white paper „Wireless 101“ to learn more about our patented wireless technology.](#)

- o Patented filter technology
- o PROFIBUS DP interface
- o PROFIsafe
- o Plug & Play – No device configuration required
- o Up to 3000 meter range
- o Transmission speed up to 1.5 Mbit/s



# BLUETOOTH 5 IN DATAEAGLE 373x

## Very fast data transmission via radio

The use of modern Bluetooth 5 wireless technology in the DATAEAGLE 373x enables the highest requirements in terms of speed and latency. This makes the DATAEAGLE 373x is particularly suitable for high-performance and safety applications.

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



# APPLICATION EXAMPLES

## 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.](#)

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



# WIRELESS PROFIBUS - DATAEAGLE 3000

The differences at a glance

| Product                       | Frequency              | Typical Distance* | Max. PROFIBUS Transmission rate | Protection class | Region    |
|-------------------------------|------------------------|-------------------|---------------------------------|------------------|-----------|
| <a href="#">Compact 373x</a>  | 2,4 GHz<br>Bluetooth 5 | 300 m             | 1,5 MBit/s                      | IP20             | Worldwide |
| <a href="#">X-treme 373x</a>  | 2,4 GHz<br>Bluetooth 5 | 300 m             | 1,5 MBit/s                      | IP65             | Worldwide |
| <a href="#">Compact 3333A</a> | 869 MHz                | 1000 m            | 1,5 MBit/s                      | IP20             | Europe    |
| <a href="#">X-treme 3333A</a> | 869 MHz                | 1000 m            | 1,5 MBit/s                      | IP65             | Europe    |
| <a href="#">Compact 3343A</a> | 915 MHz                | 1000 m            | 1,5 MBit/s                      | IP20             | America   |
| <a href="#">X-treme 3343A</a> | 915 MHz                | 1000 m            | 1,5 MBit/s                      | 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.

**Order example: A radio link with 2 users for PROFIBUS and control cabinet mounting.**

- 3 x 15375 - DATAEAGLE Compact 373x (basic devices)
- 3 x 15381 - Interface PROFIBUS 1-4 (interface option, 1 Master and 2 Slaves)
- 1 x 15383 - Configuration master (set configuration for Plug & Play)
- 2 x 15384 - Configuration slave (set configuration for Plug & Play)

| Step 1 - Select basic device |                        |
|------------------------------|------------------------|
| Order number                 | Basic device           |
| 15375                        | DATAEAGLE Compact 373x |
| 15376                        | DATAEAGLE X-treme 373x |



| Step 2 - Select interface options |                         |                |
|-----------------------------------|-------------------------|----------------|
| Order number                      | Interface               | Link           |
| 15380                             | PROFIBUS                | Point-to-Point |
| 15381                             | PROFIBUS                | Multipoint 1-4 |
| 15382                             | PROFIBUS and PROFI-safe | Multipoint 1-8 |



| Step 3 - Select set configuration for Plug & Play |             |
|---|-------------|
| Order number                                      | Device type |
| 15383   | Master      |
| 15384   | Slave       |



# DATAEAGLE COMPACT 373x

## 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 °C      |
| Conformity                | CE, FCC, IC       |
| Weight                    | 130 g             |
| Width                     | 22,5 mm           |
| Height                    | 99 mm             |
| Depth                     | 114,5 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. PROFIBUS DP transmission rate | 1.5 MBit/s   |
| PROFIBUS DP connection             | 9 pol. SUB-D |

|                                   |       |
|-----------------------------------|-------|
| Order number: Point-to-Point      | 15380 |
| Max. Number of radio slaves       | 1     |
| Max. Number of PROFIBUS DP slaves | 4     |
| PROFIsafe                         | No    |

|                                   |       |
|-----------------------------------|-------|
| Order number: Multipoint          | 15381 |
| Max. Number of radio slaves       | 4     |
| Max. Number of PROFIBUS DP slaves | 4     |
| PROFIsafe                         | No    |

|                                    |       |
|------------------------------------|-------|
| Order number: PROFIsafe Multipoint | 15382 |
| Max. Number of radio slaves        | 4     |
| Max. Number of PROFIBUS DP slaves  | 8     |
| PROFIsafe                          | Yes   |

### ORDERING PROCESS

[Select here \(page 4\)](#)

- [Here you find all informations about antennas and accessories](#)
- [Go back to product overview](#)





# DATAEAGLE X-TREME 373x

## Technical data



### o GENERAL

|                           |                        |
|---------------------------|------------------------|
| Voltage supply            | 24 V DC                |
| Connection Voltage supply | M12, A-coded           |
| Power consumption         | 100 mA                 |
| Fixing                    | 4-hole screw fastening |
| Protection class          | IP65                   |
| Temperature range         | -20...+60 °C           |
| Conformity                | CE, FCC, IC            |
| Weight                    | 280 g                  |
| Width                     | 88 mm                  |
| Height                    | 120 mm                 |
| Depth                     | 42 mm                  |
| Color                     | Black                  |

### o 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 |

### o INTERFACE

|                                    |              |
|------------------------------------|--------------|
| Max. PROFIBUS DP transmission rate | 1.5 MBit/s   |
| PROFIBUS DP connection             | M12, B-coded |

|                                   |       |
|-----------------------------------|-------|
| Order number: Point-to-Point      | 15380 |
| Max. Number of radio slaves       | 1     |
| Max. Number of PROFIBUS DP slaves | 4     |
| PROFIsafe                         | No    |

|                                   |       |
|-----------------------------------|-------|
| Order number: Multipoint          | 15381 |
| Max. Number of radio slaves       | 4     |
| Max. Number of PROFIBUS DP slaves | 4     |
| PROFIsafe                         | No    |

|                                    |       |
|------------------------------------|-------|
| Order number: PROFIsafe Multipoint | 15382 |
| Max. Number of radio slaves        | 4     |
| Max. Number of PROFIBUS DP slaves  | 8     |
| PROFIsafe                          | Yes   |

### o ORDERING PROCESS

[Select here \(page 4\)](#)

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# DATAEAGLE COMPACT 3333A

## Technical data



### o GENERAL

|                           |                   |
|---------------------------|-------------------|
| Voltage supply            | 24 V DC           |
| Connection Voltage supply | Terminal clamps   |
| Power consumption         | 200 mA            |
| Fixing                    | DIN rail mounting |
| Protection class          | IP20              |
| Temperature range         | -20...+60 °C      |
| Conformity                | CE (869 MHz)      |
| Weight                    | 160 g             |
| Width                     | 22,5 mm           |
| Height                    | 99 mm             |
| Depth                     | 114,5 mm          |
| Color                     | Black             |

### o RADIO TECHNOLOGY

|                          |                         |
|--------------------------|-------------------------|
| Frequency                | 869 MHz                 |
| Transmitting power       | 500 mW (EIRP)           |
| Max. Number radio slaves | 4                       |
| Range indoor             | 300 m                   |
| Range outdoor            | 1000 m                  |
| Antenna connection       | SMA Connection - 50 Ohm |

### o INTERFACE

|                                    |              |
|------------------------------------|--------------|
| Max. PROFIBUS DP transmission rate | 1.5 MBit/s   |
| PROFIBUS DP connection             | 9 pol. SUB-D |
| Max. Number PROFIBUS DP slaves     | 4            |
| PROFIsafe                          | No           |

### o ORDER NUMBER

|        |       |
|--------|-------|
| Master | 11142 |
| Slave  | 11143 |

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# DATAEAGLE X-TREME 3333A

## Technical data



### o GENERAL

|                           |                        |
|---------------------------|------------------------|
| Voltage supply            | 24 V DC                |
| Connection Voltage supply | M12, A-coded           |
| Power consumption         | 200 mA                 |
| Fixing                    | 4-hole screw fastening |
| Protection class          | IP65                   |
| Temperature range         | -20...+60 °C           |
| Conformity                | CE (869 MHz)           |
| Weight                    | 300 g                  |
| Width                     | 88 mm                  |
| Height                    | 120 mm                 |
| Depth                     | 42 mm                  |
| Color                     | Black                  |

### o RADIO TECHNOLOGY

|                          |                         |
|--------------------------|-------------------------|
| Frequency                | 869 MHz                 |
| Transmitting power       | 500 mW (EIRP)           |
| Max. Number radio slaves | 4                       |
| Range indoor             | 300 m                   |
| Range outdoor            | 1000 m                  |
| Antenna connection       | SMA Connection - 50 Ohm |

### o INTERFACE

|                                    |              |
|------------------------------------|--------------|
| Max. PROFIBUS DP transmission rate | 1.5 MBit/s   |
| PROFIBUS DP connection             | M12, B-coded |
| Max. Number PROFIBUS DP slaves     | 4            |
| PROFIsafe                          | No           |

### o ORDER NUMBER

|        |       |
|--------|-------|
| Master | 11370 |
| Slave  | 11371 |

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# DATAEAGLE COMPACT 3343A

## Technical data



### o GENERAL

|                           |                   |
|---------------------------|-------------------|
| Voltage supply            | 24 V DC           |
| Connection Voltage supply | Terminal clamps   |
| Power consumption         | 200 mA            |
| Fixing                    | DIN rail mounting |
| Protection class          | IP20              |
| Temperature range         | -20...+60 °C      |
| Conformity                | FCC (915 MHz)     |
| Weight                    | 160 g             |
| Width                     | 22,5 mm           |
| Height                    | 99 mm             |
| Depth                     | 114,5 mm          |
| Color                     | Black             |

### o RADIO TECHNOLOGY

|                          |                         |
|--------------------------|-------------------------|
| Frequency                | 915 MHz                 |
| Transmitting power       | 500 mW (EIRP)           |
| Max. Number radio slaves | 4                       |
| Range indoor             | 300 m                   |
| Range outdoor            | 1000 m                  |
| Antenna connection       | SMA Connection - 50 Ohm |

### o INTERFACE

|                                    |              |
|------------------------------------|--------------|
| Max. PROFIBUS DP transmission rate | 1.5 MBit/s   |
| PROFIBUS DP connection             | 9 pol. SUB-D |
| Max. Number PROFIBUS DP slaves     | 4            |
| PROFIsafe                          | No           |

### o ORDER NUMBER

|        |       |
|--------|-------|
| Master | 11148 |
| Slave  | 11149 |

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# DATAEAGLE X-TREME 3343A

## Technical data



### o GENERAL

|                           |                        |
|---------------------------|------------------------|
| Voltage supply            | 24 V DC                |
| Connection Voltage supply | M12, A-coded           |
| Power consumption         | 200 mA                 |
| Fixing                    | 4-hole screw fastening |
| Protection class          | IP65                   |
| Temperature range         | -20...+60 °C           |
| Conformity                | FCC (915 MHz)          |
| Weight                    | 300 g                  |
| Width                     | 88 mm                  |
| Height                    | 120 mm                 |
| Depth                     | 42 mm                  |
| Color                     | Black                  |

### o RADIO TECHNOLOGY

|                          |                         |
|--------------------------|-------------------------|
| Frequency                | 915 MHz                 |
| Transmitting power       | 500 mW (EIRP)           |
| Max. Number radio slaves | 4                       |
| Range indoor             | 300 m                   |
| Range outdoor            | 1000 m                  |
| Antenna connection       | SMA Connection - 50 Ohm |

### o INTERFACE

|                                    |              |
|------------------------------------|--------------|
| Max. PROFIBUS DP transmission rate | 1.5 MBit/s   |
| PROFIBUS DP connection             | M12, B-coded |
| Max. Number PROFIBUS DP slaves     | 4            |
| PROFIsafe                          | No           |

### o ORDER NUMBER

|        |       |
|--------|-------|
| Master | 11330 |
| Slave  | 11331 |

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