



SCHILDKNECHT
SMART DATA COMMUNICATION



open
SAFETY



DATAEAGLE® 4000
WIRELESS ETHERNET



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 473x is particularly suitable for high-performance and safety applications.

- 2 times faster data transmission with minimal latency
- 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.](#)

- Substitute of conductor lines
- Substitute of trailing cables and cable chains
- Substitute of optical data transceivers
- Crane systems
- Warehouse systems
- Automotive industry
- Transport vehicles
- Water, wastewater, waste and raw material management
- 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 Switch	Protection class	Region
Compact 473x	2,4 GHz Bluetooth 5	300 m	Yes	IP20	Worldwide
X-treme 473x	2,4 GHz 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 PROFI-safe via PROFINET and basic device for control cabinet mounting.

3 x 15475 - DATAEAGLE Compact 473x (basic devices)

3 x 15483 - Interface PROFINET (interface option for 1 master and 2 slaves)

1 x 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 473x



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 1-6
15483	EtherNet/IP, Safety, PROFI-safe, openSAFETY	Multiprotocol, Multipoint 1-8
15485	EtherNet/IP, Safety, PROFI-safe, openSAFETY, CIP Safety	Point-to-Point



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 °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
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



o 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

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- o [Go back to product overview](#)



DATAEAGLE X-TREME 473x

Technical data



o GENERAL

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 °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. Ethernet transmission rate	100 Mbit
2-port Switch	No
Ethernet connection	M12, B-coded

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DATAEAGLE X-TREME 473x

Technical data



o 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

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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...+60 °C
Conformity	CE
Weight	160 g
Width	22,5 mm
Height	99 mm
Depth	114,5 mm
Color	Black

RADIO TECHNOLOGY

Frequency	869 MHz
Transmitting power	500 mW (EIRP)
Max. Number of radio slaves	4
Range indoor	100 m
Range outdoor	1000 - 3000 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
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DATAEAGLE X-TREME 4333

Technical data



o 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...+60 °C
Conformity	CE
Weight	280 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 -3000 m
Antenna connection	SMA connector (female) - 50 Ohm

o 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

o ORDER NUMBER

DATAEAGLE X-treme 4333	11372
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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 °C
Conformity	FCC
Weight	160 g
Width	22,5 mm
Height	99 mm
Depth	114,5 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 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 4343	11158
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DATAEAGLE X-TREME 4343

Technical data



o 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...+60 °C
Conformity	FCC
Weight	280 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 -3000 m
Antenna connection	SMA connector (female) - 50 Ohm

o 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

o ORDER NUMBER

DATAEAGLE X-treme 4343	11374
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