

# Modular Radio Modem With inputs and outputs



## DEC 2000

is available with different radio modules and transmission power, making it the most universal radio modem on the entire market.

# DATAEAGLE COMPACT 2000

Regarding the **DATAEAGLE COMPACT 2000** (DEC 2000) the DATAEAGLE concept has been expanded by a device variant with modular digital and analogue inputs/outputs.

This enables for example the transfer of digital 24 V DC-inputs to Open-Collector outputs by radio or signals are handed over to a master control system such as e.g. an S7 200/300/400/1200 via a Fieldbus interface such as Profibus DP, Profinet, MPI, Modbus or CAN.

The DATAEAGLE then works like a remote input/output module.

The DEC 2000 basic device may be equipped with up to eight extension modules.

An extension module has six universal interfaces adjustable as input or output and two analogue inputs and two analogue outputs.

**DATAEAGLE**  
DATENFUNKSYSTEME



**Schildknecht**  
*Die intelligente Lösung*

Dear customers,  
should you have any questions regarding data radio transmission – whether general or very specific problems – please do not hesitate to call us.

We are looking forward to finding the most optimal solution for you!



Thomas Schildknecht, Dipl.-Ing.

### Schildknecht AG

Haugweg 26  
D-71711 Murr  
Phone ++49 / (0) 7144/8 97 18-0  
Fax ++49 / (0) 7144/8 97 18-29

Email:  
[office@schildknecht.ag](mailto:office@schildknecht.ag)  
Internet:  
<http://www.schildknecht.ag>  
<http://www.dataeagle.de>

**Areas and industries  
where Schildknecht  
products have been  
successfully applied  
already for years:**

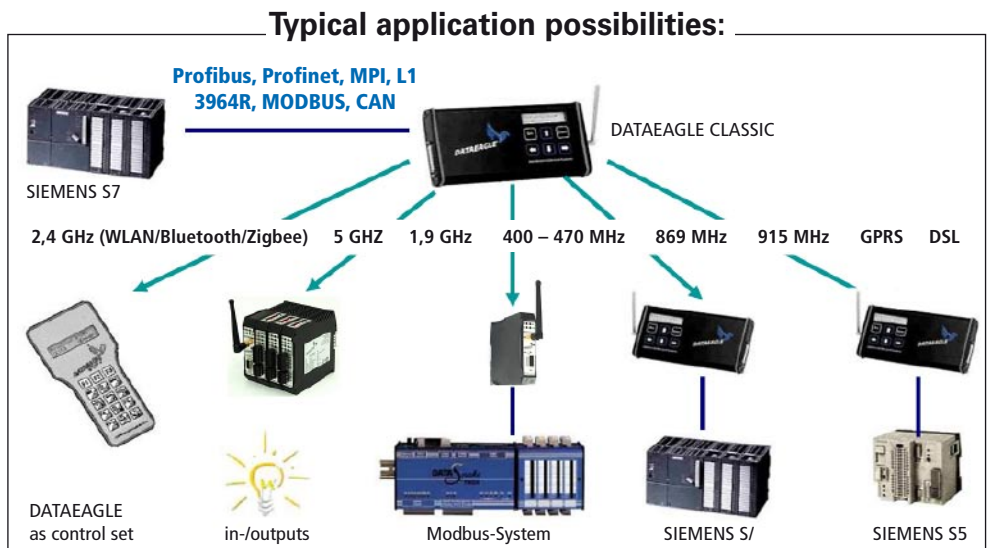
Mechanical engineering, mining,  
plant engineering, robotics,  
chemistry, packing machines,  
industrial data capture,  
access control, parking machines,  
pay machines, shipbuilding,  
rail, automotive industry,  
printing machines,  
industrial washing machines,  
medical engineering,  
conveyance and for many more!



Example of application

### Sewage treatment plant

Within a heterogeneous control and signal environment, data from an S7 PLC e.g. on a scraper or secondary sedimentation tank with DATAEAGLE CLASSIC and Profibus/Profinet together with DATAEAGLE COMPACT in- and outputs and DATAEAGLE WOPY (mobile display and control set with radio interface) may be operated in a radio network.



Example of application

### Water sector infrastructure

An impulse transmitter for consumption measuring in water supply supplies a digital 24 V signal to the counter input of the DEC 2530 with a GPRS-radio module. This requires also a SIM-card with mobile-phone service agreement. Via a mobile radio connection, this counter value is transferred to a control centre in the control room within an adjustable time interval (one minute up to one week), which in turn may be equipped with a GPRS (DATAEAGLE CLASSIC 2530) or DSL Internet-connection (DATAEAGLE CLASSIC 2U30). The DATAEAGLE partner device may then transfer the data to the central PLC as a normal Fieldbus participant by MPI, Modbus, Profibus or Profinet Fieldbus interface.

Example of application

### 24 V-signal-transmission

Thanks to a point-to-point radio connection in a DATAEAGLE Compact 2320 with 500 mW, 24 V DC-signal states may be bi-directionally confirmed on an Open-Collector output over a distance of up to three kilometres and transferred fed back.



## Technical data\* DATAEAGLE COMPACT 2000:

Model	Item-no.	Radio transmission	Transmission power
DEC 2100	10972	1,9 GHz DECT	250 mW, Europe-wide free admission
DEC 2320	10974	868 MHz	500 mW, Europe-wide free admission
DEC 2420	10995	400 – 470 MHz	1 W, liable to registration
DEC 2530	10983	900/1800 MHz GPRS	2 W, worldwide, mobile phone agreement
DEC 2700	10975	2,4 GHz Bluetooth	100 mW, worldwide free admission

- Power supply: 9 – 33 V DC max 500 mA @ 24 V DC, outgoing line downwards
- Housing: Top hat rail 35 mm mountable, protection class IP20, 300g @ 1 extension module
- Dimensions: Depth 140 mm (with cable), height 100 mm, width 23 mm basic device +23 mm extension modules
- Temperature range: – 20°C to + 60°C (+ 70°C an option)
- Connections: Signal connections outgoing forward with screw coupling terminals, SMA-antenna terminal.
- Inputs/Outputs: Inputs and outputs modularly pluggable (digital inputs/outputs mixable):  
 Maximal 6 digital 9 – 33 V DC-inputs with LED-display, switchable as counter or signal.  
 Maximal 6 digital Open-Collector (OC)-outputs with LED-display.  
 2 analogue inputs 0 – 10 V or 4 – 20 mA switchable 12-bit-resolution.  
 2 analogue outputs 0 – 10 V or 4 – 20 mA switchable 12-bit-resolution.  
 Maximal 8 digital relay outputs or maximal 8 digital 24 V DC inputs individually mixable.
- Partner devices: DATAEAGLE COMPACT 2000 or DATAEAGLE CLASSIC 2000.

