BLACKBIRD
SMART DATA COLLECTION

Bring your factory into a sustainable future
Factbird IoT Hardware Solution
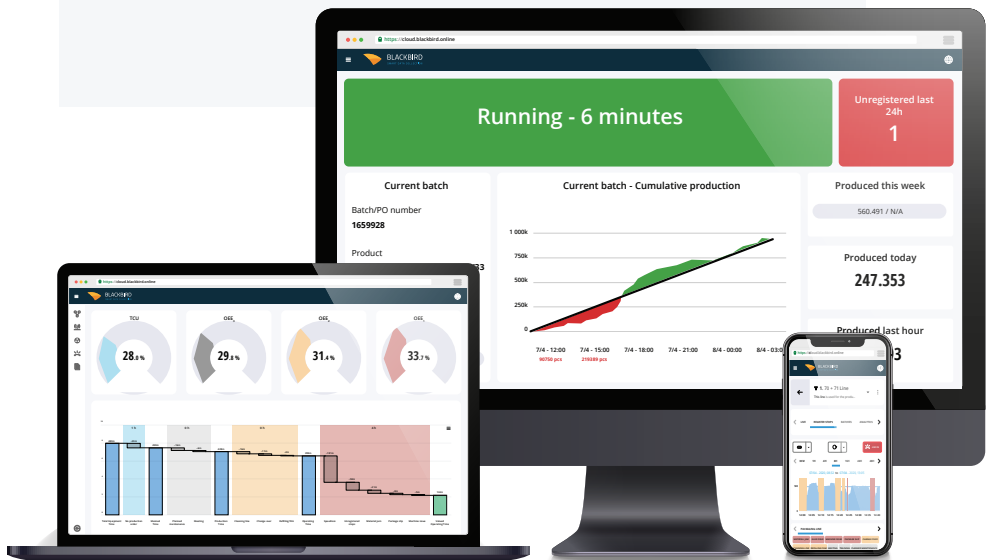
Production process data anywhere in real-time

Factbird® is Blackbird's IoT Hardware that can be quickly installed on your production line and helps to easily collect and transmit your production data to the Blackbird cloud.

✔ Plug and Play – The installation can be done in less than 1 hour

✔ Wireless data transmission – GSM and WiFi connectivity

✔ All data in the cloud - Processing of both analogue and digital signals

✔ Easily scalable – From 1 to practically endless inputs

✔ Suitable for various industry standard sensors – Irrespective of the manufacturer

✔ Small in size – easy to install anywhere in the factory

Do you need a fast and simple solution?

2 inputs

2 connections - WiFi & 4G/LTE

2 Signals - Analog & Digital Inputs

Constantly improving hardware
Latest encryption technology
Automatic buffering

Product Specifications

Factbird® Duo IoT Box

Parameter	Value
Sensor input	2 inputs from standard sensors
Width	151 mm / 5.9 in
Height	43 mm / 1.7 in
Depth	73 mm / 2.8 in
Weight	175 g / 6 oz
Material	ABS
Gasket material	Silicone

Connectivity LTE

Parameter	Value
LTE bands	1, 2, 4, 5, 8, 12
UMTS bands	850, 900, 1900, 2100

Connectivity WiFi (coming soon)

Parameter	Value
Wi-Fi frequencies	2.4 / 5 GHz
IEEE 802.11 standards	a/b/g/n/ac

Power Input

Parameter	Value
Input Voltage	24 VDC
Input Current	1 A
Connector plug	M8 (4 pin)

Sensor Input Digital

Parameter	Value
Power supply to sensor	24 VDC
Sensor input levels	IEC 61131-2 Type 1, 2, 3
Input frequency max	100 Hz
Pulse width minimum	5 ms
Sensor type	NPN or PNP
Sensor max current draw	200 mA
Counter increament	Falling edge
Connector plug	M8 (4 pin)

Sensor Input Analog (coming soon)

Parameter	Value
Power supply to sensor	24 VDC
Sensor input levels	4 - 20 mA
Sensor max current draw	200 mA
Connector plug	M8 (4 pin)

Power Supply Unit (Packaged)

Parameter	Value
Input voltage	85 - 264 VAC
Input current	0.6A at 115 VAC, 0.35A at 230 VAC
Frequency	47 - 63Hz
Model	GST25B24
Manufacture	Mean-Well
Plug Type	IEC320-C8
Operating Temperature	-30 to +70°C
IP Rating	IP20

End of life
When you wish to dispose the sensor cable, please return it to Blackbird ApS for recycling or recycle local according to local laws where end-of-life takes place.

Limitations of liability
Blackbird ApS shall not be responsible for any direct or indirect damages, commercial losses, loss of profit in any way connected with the Factbird Digital.

Warranty
Blackbird ApS's warranty is that the product is free from defects in materials and workmanship for a period of one year from the date of sale by Blackbird ApS.
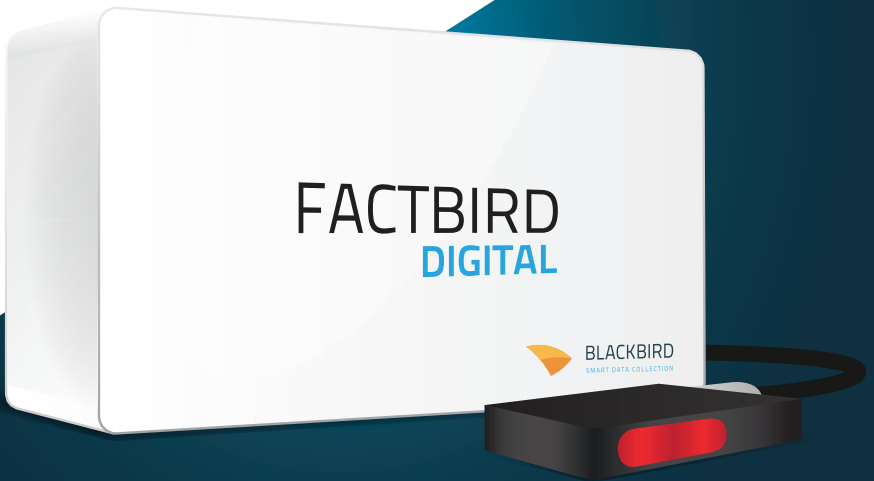
Your production data, anywhere, in real time.

1 input

1 connection - WiFi or 4G/LTE

1 Digital Input

FACTBIRD
DIGITAL

BLACKBIRD
SMART DATA COLLECTION

Product Specifications

Factbird Digital Box

Parameter	Value
IP Rating	IP67
Length	160 mm
Width	80 mm
Height	65 mm
Material	Polycarbonate
Gasket Material	Polyurethane
UV resistance	UL 508
Temperature	0-45°C

Sensor Input

Parameter	Value
Voltage out to sensor	12 VDC
Voltage input from sensor	0-12 V
V_{low}	< 2 V
V_{high}	> 2.7 V
Input frequency max	100 Hz
Pulse width minimum	5 ms
Sensor type	NPN
Sensor max current draw	100 mA
Counter increament	Falling Edge
Connector Plug	M8 (4 pin)

Connectivity GSM

Parameter	Value
Frequency band	850/900/1800/1900 MHz
Data	GPRS Class 12

Connectivity WiFi

Parameter	Value
WiFi Protocols	802.11 b/g/n
Security	WPA/WAP2 PSK
Frequency band	2.4 GHz

Power Input

Parameter	Value
Input Voltage	12 VDC
Input Current	1 A

Power Supply Unit (Packaged)

Parameter	Value
Input voltage	100-240 VAC
Input current	0,5 A
Frequency	50-60 Hz
Model	T6263ST
Manufacteur	Stronics
Plug Type	Europlug
Operating Temperature	0-40°C
IP Rating	No

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Factbird® Analog

Your production data, anywhere, in real time.

1 input

1 connection - WiFi or 4G/LTE

1 Analog Input

FACTBIRD
ANALOG

BLACKBIRD

Product Specifications

Factbird Analog Box

Parameter	Value
IP Rating	IP67
Length	160 mm
Width	80 mm
Height	65 mm
Material	Polycarbonate
Gasket Material	Polyurethane
UV resistance	UL 508
Temperature	0-45°C

Sensor Input Factbird Analog

Parameter	Value
Voltage out to sensor	24 VDC
Voltage current from sensor	4-20 mA
Sensor max current draw	100 mA
Sampling rate	0.1 Hz
Sampling resolution	1024 Steps
Connector Plug	M8 (4 pin)

Connectivity GSM

Parameter	Value
Frequency band	850/900/1800/1900 MHz
Data	GPRS Class 12

Connectivity WiFi

Parameter	Value
WiFi Protocols	802.11 b/g/n
Security	WPA/WAP2 PSK
Frequency band	2.4 GHz

Power Input

Parameter	Value
Input Voltage	12 VDC
Input Current	1 A

Power Supply Unit (Packaged)

Parameter	Value
Input voltage	100-240 VAC
Input current	0,5 A
Frequency	50-60 Hz
Model	T6263ST
Manufacteur	Stronics
Plug Type	Europlug
Operating Temperature	0-40°C
IP Rating	No

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Do you need PLC data sent directly to the Cloud?

8 inputs or more

3 connections
– WiFi, Ethernet & 4G/LTE

2 Signals - Analog & Digital Inputs

Programmable Omron NX1
PLC inside

FC CE

Factbird® View
Enhance your production data with video.

1 video input

1 connection - WiFi

Standard USB video camera

Live video footage synchronized
with perfomance data

Product Specifications

Factbird View Box

Parameter	Value
IP Rating	IP66/IP67
Length	160 mm
Width	80 mm
Height	65 mm
Material	Polycarbonate
Gasket Material	Polyurethane
UV resistance	UL 508
Temperature	0-45 C

Connectivity

Parameter	Value
Connection types	Ethernet, WiFi
WiFi Protocols	802.11 b/g/n/e/i
Security	WPA/WAP2 PSK, WPS
Frequency band	2.4 GHz
Transmission power max	31 dBm
Connect through captive portal	Not supported
Ports & Protocols	80 (TCP) HTTP, 443 (TCP) HTTPS, 53 (UDP) DNS, 123 (UDP) NTP

Power Input

Parameter	Value
Input Voltage	5 VDC
Input Current	2 A

Video Settings

Parameter	Value	
System I (default)		
Avg. bitrate	1000 kbps	
Resolution	480 p	
Frame rate	20 fps	
System II		
Avg. bitrate	2.4 mbps	variable depending on resolution and frame rate
Resolution	480 p	max 1080p
Frame rate	30 fps	default and max

Power Supply Unit (Packaged)

Parameter	Value
Input voltage	100-240 VAC
Input current	0,5 A
Frequency	50-60 Hz
Model	T6259ST
Manufacturer	Stontronics
Plug Type	EU Type
Operating Temperature	0-40 C
IP Rating	No

Supported Cameras and Connections (examples)

Camera connection	USB	
	HDMI	using USB Capture HDMI Gen 2 by Magewell
Supported cameras	Logitech Webcam	
	GoPro	

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Quick and easy installation

Installation takes less than an hour. Simply plug
The sensor into power, log onto Blackbirds
Application, and access your production data.

Simple Implementation

No matter the machine, Factbird can be installed in any
environment. You don't have to modify your existing
systems, nor shut down your production during
installation.

Resource Saver

Not only will you be able to use the data findings
to find hidden and useful information, you will
Also save time by minimizing downtime, boosting
Productivity and reducing waste.

Our Success Stories

Royal Unibrew

Royal Unibrew installed the first Factbird on their production line in just two hours. After a few weeks, the Royal Unibrew team had eliminated problems enough to improve output with **14%**.

Xellia Pharmaceuticals

The operators used to register everything manually at Xellia Pharmaceuticals. Installing Factbirds made it possible for operators to register stop causes on a screen and **made it easy** to make a production report.

Book a demo now

Scan QR Code to book a demo

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