

# DATASHEET

## Factbird® DUO 2.0



## COLLECT DATA WITH PLUG-AND-PLAY EASE

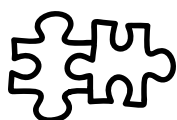
Factbird® DUO is an IoT data collection device that is designed to provide you with reliable data, automatically from any two sensors of your choice. It works with any digital or analog sensors on the market and is designed to withstand any production environment.

Access your data from anywhere at any time, and start making data-driven decisions.

## How it works

Factbird® DUO collects data from sensors such as production units, material temperature, and more. This data is securely transmitted directly to the Factbird cloud server via Wi-Fi or mobile network and visualized in real time on a secure web-based user interface accessible from your smartphone, tablet, or PC.

## Key features



### Non-invasive solution

An end-to-end solution that is retrofitted to seamlessly integrate with existing infrastructure.



### Effortless Installation

Installation can be done in under 1 hour, while production continues uninterrupted.



### Secure data

Advanced encryption and secure network communication ensure maximum protection of your data.

## Checklist for installation

- Factbird® DUO data collection device
- Power supply unit
- Sensor (digital or analog)
- Analog converter (when installing an analog sensor)
- Sensor cable

## Product Specifications



General product specification	
Sensor input	2 inputs as standard, 4 inputs with a splitter cable*. Further expandability is available upon request—e.g., 8 digital inputs.
Dimensions WxHxD	151×43×73mm / 5.9×1.7×2.8 in
Weight	175 g / 6 oz
Enclosure material	ABS
Gasket material	Silicone
Connector power	M8 male (4 pin)
Connector sensor	M8 female (4 pin)
Operating temperature	-20 to +65°C

Power	
Input power	24 VDC
Input current	1 A
Sensor voltage	24 VDC
Sensor max current	200 mA

Sensor Input Digital	
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
Counter increment	Falling edge

Sensor Input Analog**	
Sensor input levels (via convertors)	4-20 mA / 0-10V

Connectivity	
Connection types	Cellular (4G LTE, 3G 2G), Wi-Fi
LTE bands	LTE FDD: 12, 28, 13, 20, 18, 19, 26, 5, 8, 4, 3, 2, 1, 7. LTE TDD: 39, 40, 41, 38. WCDMA: 5, 8, 2, 1. GSM: GSM 850, E-GSM 900, DCS 1800, PCS 1900.
Wi-Fi frequencies	2.4 / 5 GHz
IEEE 802.11 standards	a/b/g/n

EMC Emission	
Radiated emission and conducted emission	EN 55022: 2006 + A1:2007 47 CFR Part 15 Class B

EMC immunity	
ESD	EN 61000-4-2:2009
Radiated RF	EN 61000-4-3:2006 + A1:2008 + A2:2010
Conducted fast transient	EN 61000-4-4:2004 + A1:2010
Conducted surge transient	EN 61000-4-5:2006
Conducted RF	EN 61000-4-6: 2009
Power frequency magnetic field	EN 61000-4-8:2010
Voltage dips and interruptions	EN 61000-4-11:2004

\*Analog can be up to two inputs on two standard ports. Digital can be up to four inputs with splitter cables.

\*\*Only on hardware version 2 and higher and via adaptor.

## Product Specifications



Power Supply Unit (packaged)	
Input Voltage	100 - 240 VAC
Output Voltage	24 VDC
Input Current	0.6 A at 115 VAC, 0.35A at 230 VAC
Maximum output current	1.04 A
Frequency	50 / 60 Hz
Model	GST25B24
Manufacturer	Mean-Well
Power cord - AC outlet plug type	EU, UK, or US versions available
Power cord - AC PSU plug type	IEC320-C7
PSU - AC receptacle type	IEC320-C8
PSU - DC plug type	M8 Female (4 Pin), IEC61076-2-104
Operating Temperature	-30 to +70°C

Factbird Duo can be powered by connecting directly to a 24VDC supply as an alternative to using the packaged power supply unit, provided adequate circuit protection is installed. Please refer to the power limits in the datasheet or contact us if you have any further questions.

### End of life

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

### Limitations of liability

Factbird ApS shall not be responsible for any direct or indirect damages, commercial losses, loss of profit in any way connected with the Factbird® DUO

### Warranty

Factbird 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 Factbird ApS.