# Bluetooth sensors

## Environmental Bluetooth sensors

for the DIRIS Digiware system



#### **Function**

**B-TRH** and **B-MAG** sensors communicate via Bluetooth with DIRIS Digiware M gateways and DIRIS / ISOM Digiware D displays.

The B-TRH sensor allows you to integrate temperature and humidity data into your Digiware measurement system. So, when it comes to bringing your energy efficiency into conformity with ISO 50001, it is now possible to correlate energy consumption with changing external factors. The sensor can also be used to anticipate maintenance operations, by issuing an alert in the event of overheating of the electrical cabinet or in the event of a leak, for example.

The B-MAG sensor is capable of detecting a loss of magnetic contact and issues an alert when a door of an electrical cabinet or technical room is opened.

## Advantages

## Easy to install

- Built-in mounting accessory for easy installation.
- No additional wiring is required, the data is sent to the gateway or display via Bluetooth.
- An ultra-compact design that fits into the tightest of spaces.

#### Easy to configure

Automatic detection and pairing of sensors via D-xx display or M-xx gateway.

#### Maximum responsiveness

Sends real-time alerts when the measured temperature or humidity exceeds a predetermined threshold or when a door opening is detected.

#### General characteristics

Pair up to 16 sensors with an M-xx gateway or D-xx display to enable local and remote viewing on the embedded WEBVIEW Web server.

## The solution for

- > Data centres
- > Industry
- > Buildings



## **Strong points**

- > Easy to install
- > Easy to configure
- > Maximum responsiveness

#### Conformity to standards

> EN 300 328 v2.2.0 (Radio)



> ISO 14025

## Create your own project

Find the best DIRIS Digiware configuration: www.meter-selector.com



## **Expert Services**



SERVICES EXPERTS

Socomec offers a range of services to ensure a functional, accurate and reliable energy monitoring system as part of your

ISO 50001 strategy.

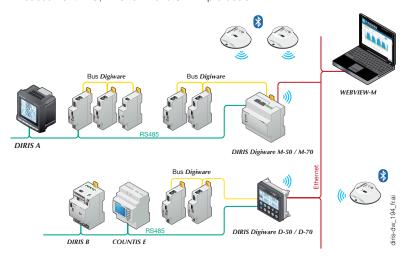
- Radio audit.
- Commissioning.

For further information, please talk to your Socomec contact.



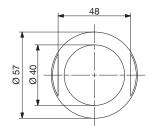
## Communication architectures

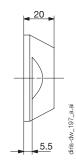
Gateways and displays make this data available over the Ethernet network via Modbus TCP/RTU, BACnet IP and SNMP protocols.



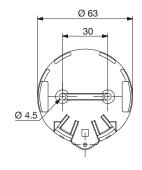
## **Dimensions**

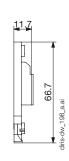
## B-TRH and B-MAG





## Mounting bracket





## Technical characteristics

	B-TRH	B-MAG	
Functional specifications			
Frequency	2.4 GHz – Bluetooth Low Energy 4.0/4.2		
Range	Up to 500 meters in open field (+4 dBm)		
Transmission frequency	Adjustable from 0.1 to 10 seconds	Adjustable from 0.1 to 10 seconds	
Battery characteristics			
Power supply	3 VDC – internal lithium battery	3 VDC - internal lithium battery	
Lifetime	Up to 16 years	Up to 10 years	
Measurement performance			
Range	Temperature: -40 +85 °C Humidity: 0 100%	-	
Resolution	Temperature: 0.01 °C Humidity: 0.01%	-	
Accuracy	Temperature: ±0.4 °C Humidity: ±2.5% max (0 - 90%); ±3.5% max (90 - 100%)	-	
Mechanical characteristics			
Weight	41 g	41 g	
Case materials	DELRIN (POM C)	DELRIN (POM C)	
	Food Compatible (90/128/EEC)	Food Compatible (90/128/EEC)	
Environmental characteristic	cs		
Ingress Protection rating	IP65	IP68	
Temperature	-40 +85 °C	-40 +85 °C	

## References

Range of Bluetooth sensors		Reference
B-TRH	Temperature + humidity Bluetooth sensor	4829 <b>0800</b>
B-MAG	Magnetic contact Bluetooth sensor	4829 <b>0801</b>

