

ECO ES7 - MOVEMENT SENSOR



Bluetooth Low Energy Motion sensor

BENEFITS

- Integrated 3 axis accelerometer for Angular position and Motion measurement
- High autonomy : up to 4.8 years
- Waterproof (IP68)
- Smart & secure programming by NFC
- Over The Air Programming (OTAP)



TECHNICAL SPECIFICATIONS

OPERATING MODE

Frequency 2.4 GHz - Bluetooth Low Energy 4.0/4.2
Output power Up to +4 dBm (configurable)
Range Up to 200 meters in open field (+4dBm)

Transmission period Advertising period (0,1 sec to 10 sec – configurable in seconds)

Radio frame format

Motion event detection (MOV)*	Angular position measurement (ANG)*
Identifier (15 characters max) (15 bytes) Motion detection counter: Total number of motion events detected (15 bits) Motion instantaneous state (1 bit)	Identifier (15 characters max) (2 bytes) X-axis acceleration (mg) (2 bytes) Y-axis acceleration (mg) (2 bytes) Z-axis acceleration (mg) (2 bytes)

**Refer to the frames specifications for more information*

Settings and configuration Interface/protocole : NFC (Type 2)

Connected mode Datalogger transmission (record of saved sensor data)
 Battery level command

Advertising mode Periodic sensor data transmission. Immediate transmission on change of sensor state.

Sensor performance

Motion event detection (MOV)	Angular position measurement (ANG)
Range: - 8g to 8g Threshold level: between 32 and 8000 mg Motion event detector: Immediate transmission upon change of motion state	Range: -2g to 2g Resolution: 1mg (LSB) Accuracy: ±0,5% Full scale

BATTERY

Power supply	3 VDC - Internal lithium battery
Battery life	MOV = up to 4.8 years* ANG = up to 4.8 years* <i>*Refer to the battery life curves for more information.</i>
Battery level	Low battery warning in advertising frames (<15%) Battery voltage in scan response frames (configurable)

CERTIFICATIONS

Europe	CE : EN 300 328/EN 300 330, EN 301 489, EN 62311, EN 62368
USA	FCC : FCC PART 15
Canada	ISED : RSS-247/ICES-003
RoHS	Yes

HOUSING

Dimensions	Ø 36mm base – Height 11,5mm
Weight	13g
Materials	DELFIN (POM C) Compatible with food products (90/128/EEC)
Waterproof grade	IP 68
Operating temperature	-30°C to +70°C

ACCESSORIES

Tag support	(ACIOM92C) (ACIOM91) (ACIOM187) 3M PT1100 - Ø 34mm – Thickness: 1,1mm
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MECHANICAL DRAWINGS

