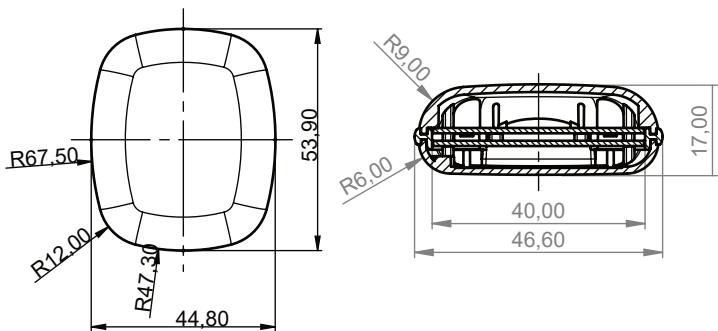


Highlights

- ▶ Accurately tracks pulse, temperature, blood oxygen, acceleration and more
- ▶ Up to several months battery life
- ▶ Secure low-energy wireless data transmission
- ▶ Charging station included for easy charging
- ▶ Indoor localisation possible



General information



Originally developed for determining the emotional response of an audience of a TV show, the Pollux EMOTION wristband is so much more. By recording medically relevant variables such as pulse, temperature, blood oxygen, EMG and more, it is feasible to monitor vital functions of hospitalized people. The wristband can be easily cleaned, disinfected and recharged via a station. Depending on the configuration, the battery lasts several months in combination with our energy-saving Pollux radio system.

Technical data

Mechanical

Weight	approx. 34 g with battery
Dimension (W/L/H)	approx. 46 / 55 / 17 [mm] (see technical drawing)
Operating temperature	-20°C to +70°C

Measurement system	Resolution (max)	Sampling rate (max)
EMG	0-1500 µV	100 Hz
Pulse	0,05 bpm	30 Hz
Blood oxygen (SpO ²)	0,10%	30 Hz
EDA/GSR/skin conductance	0-3.5 MOhm	100 Hz
Temperature	0,01°C	10 kHz
Acceleration	+/- 16g, 16 bit	4 kHz
Gyrometer	+/- 2000 dps	1 kHz
Magnetic field	+/- 4900 µT, 16 bit	400 Hz

Pollux radio system

Radio frequency	Transmission frequency: 115/433/868/915 MHz depending on country of use, ISM bands: unlicensed
	Up to 1 Mbit/s data transmission rate (per node) Dynamic adaptation to radio environment Bidirectional, multi-channel, configuration-free and self-organizing radio network
	Network packets are CRC32 protected and data is encrypted using AES procedures, automatic avoidance of interference sources and other radio systems
Power supply	Rechargeable battery
Operating time	Depending on measurement frequency and transmission rate - up to several months

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