



F-SENSOR

Datasheet

The F-SENSOR are versatile devices designed to monitor the angle of rotation and movement in various parts of the body. They are capable of detecting flexion and extension in the sagittal plane, as well as pronation and supination in the frontal plane. These sensors provide valuable data for analyzing the interaction between the body and the environment, allowing for a comprehensive assessment of movement dynamics in various contexts.

GENERAL FEATURES

- Ability to monitor movement of different body parts
- Ability to provide haptic feedback
- Bluetooth communication with WalkerView system

ELECTRICAL PARAMETERS

- docking Power supply: 80-264V 47-63Hz
- Battery: 3.7V
- Absorption Current: 60 mA

CONFORMITY

- Regulation 2017/745 - CLASS I
- Standard EN 60601-1 - CLASS I Type B

WARRANTY

- 24 months

SYSTEM SPECIFICATIONS

- Dimensions: 3.8cm x 5.2cm x 1.7cm (Length x Width x Height)
- Weight: 30 g (per sensor)
- Orientation range: 360° on Pitch and Yaw; 180° on Roll
- Accelerometer range: +/- 16g
- Sensitivity Linear acceleration: 0.488 mg / LSB @ 25°C
- Non-linear accelerometer: +/- 1%
- Accelerometer noise density: 90 $\mu\text{g} / \sqrt{\text{Hz}}$
- Gyro range: +/- 2000°/s
- Linearity of the gyroscope: +/- 1.5%
- Gyroscope Noise Density: 7mdps / $\sqrt{\text{Hz}}$
- Orientation resolution: <0.1°
- Degrees of Freedom: 6
- Operating temperature range: -20/+50°C
- Bluetooth communication: 2.1 - 2.4 GHz
- Battery life time: 6.5 h
- Charging time: 1.5 h
- Transmission range: 10m indoor; 50 m open space
- Maximum acquisition per session: 3'45"