

SmartBelt Hardware Specifications

Our Wearable Keeps Your Entire Operation Safe

The Modjoul SmartBelt is a workplace wearable designed to measure employee safety and work time. The sensors in the SmartBelt collect various data from the user to determine their activity while on the job. By collecting data such as acceleration, angular speed, proximity to other wearables, altitude, ambient temperature-pressure and humidity, companies can improve employee safety and wellbeing in the workplace through data and actionable insights.

Range of Operation

Operating Temperature of SmartBelt: -40 F to 1400 F

Operating Voltage of SmartBelt: 3.3 to 4 V

Operating Current: 25-30 mA when Wi-Fi radio is off

Peak Current: 100 mA when Wi-Fi radio is transmitting

Wi-Fi Encryption: WPA2-PSK

SmartBelt Sensors

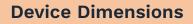
SENSOR	NUMBER	MAX VALUE	MIN VALUE	DATA ACQUISITION FREQUENCY
Accelerometer	1	4g	-4g	10 Hz
Gyroscope	1	2000º/sec	-2000º/sec	10 Hz
Magnetometer	1	+4800 μT	-4800 µT	10 Hz
Altimeter	1	30,000 ft	0	10 Hz
Humidity	1	100% RH	0	10 Hz
Temperature	1	185° F	-40° F	10 Hz
GPS	Available on demand	NA	NA	10 Hz





Battery Specifications

PARAMETER	VALUE
Normal Voltage	3.7 V
Minimum Voltage	2.50 V
Charging Current	440mA
Charging Voltage	4.2 V



Belt Buckle: 112 mm x 57 mm x 24 mm = 4.4" x 2.24" x 0.94"

Modular Device: 82 mm x 53 mm x 20 mm=3.22" x 2.08" x 0.78"

SmartBelt Body: One size fits all Nylon webbing (1270 mm x 32 mm x 1.7mm = 50" x 1.25" x 0.06")

Weight: 6 Ounces (with belt body)



General Specifications

Memory Card Storage: 512 MB

Wi-Fi Frequency: 802.11 b/g/n and 20 MHz band. 2.4 GHz ISM band

Wi-Fi Module FCC ID No: 2ADHKATWINC1500

Battery Capacity: 2000 mAh

Charging Interface: Micro-USB and Pogo Pins