

OS-3010 Intelligent Multi-Sensor Data Sheet

Wearable, wireless, intelligent multi-sensor data-acquisition platform

On-Board Intelligent Sensors

- Olea Vital-Sign Sensor™
 - 24GHz (K-Band) CW Doppler Radar Sensor
- Activity-Monitoring Sensors
 - Tri-Axis Magnetometer (compass)
 - ±50 Gauss range
 - o Tri-Axis Accelerometer
 - ±2*g* sensitivity
 - o Tri-Axis Gyroscope

Connectivity

- Wired: micro-USB
- Wireless: Bluetooth Low-Energy (BLE) 4.2

Processing & Data-Acquisition

- On-board 16-bit data acquisition system
- Processor: Cortex-M4 32-bit ARM
- Settings: set remotely through included software
- Multi-color LED indicators

Power

- Rechargeable 150mAh Li-ion battery (up to 8 hours, depending on use conditions
- 110/220 volt wall or in-vehicle adapter (one installed battery & wall adapter included)
- Consumes only 425mW (85mA at 5V)

Physical Attributes

- Dimensions: 84mm (W) x 35mm (L) x 8.7mm (D)
- Weight: Approx. 1.0 oz. US (29 grams)
- Operating temperature range: 0° to 70° C
- Enclosure: Non-hermetic Red poly-carbonate plastic, with black front panel





Visit us at www.OleaSys.com

Compatible with Raspberry Pi and all Linux Systems

Compliance

- Non-compliance to FCC, CE, ETSI, UL or FDA certifications (for non-clinical R&D use only)
- Non-compliance per Mil-spec environmental conditions. (commercial off-the-shelf)
- Units are fully RoHS compliant
- Radar subsystem complies with ETSI 300 440 and FCC 15.245 (US version)
 - o Radar frequencies:
 - 24.05 24.25 GHz (ISM/EU)
 - 24.075 24.175 GHz (US/JP)

Software and Data Acquisition, Storage & Analysis

- Licensed Software (delivered with OS-3010)
 - o On-board Olea customized firmware/software for data acquisition
 - Off-board Olea customized virtual instrumentation GUI software for data display
- GUI Software Compatibility: Windows 10, Android & Linux
- Compatible with Raspberry Pi
- Recording Time: Continuous
 – limited only by local memory of connected PC
- Olea analytic software designed specifically for "connected car" and "connected care" applications (planned optional add-on licensed software)

Ask us about our capabilities to deliver device features & custom software to meet your requirements



OleaSense Analytic Software

Note: All specifications are subject to change without notice and to verification at time of purchase.

10100447 1.4 (8/1/2019)

^{© 2019-2020} Olea Systems, Incorporated. All rights reserved. Olea, Olea Sensor Networks, Olea HeartSensor, Olea HeartSignature, Olea Authentication Token, OAT, OleaVision, OleaVision360, OleaWave and OleaSense are trademarks of Olea Systems, Incorporated. Other trademarks (registered or otherwise), names and brands may be claimed as the property of Olea Systems, Incorporated or by others.