



BioHarness™ 3

Real-Time Portable Physiological Monitoring



The new BioHarness 3 is a lightweight, chest-worn monitor and strap that incorporates ECG (electrocardiogram) and breathing rate sensors for real-time portable physiological monitoring. The BioHarness links to a RAELink3 portable modem which transmits sensor readings and GPS coordinates in real time to a PC running ProRAE Guardian safety monitoring software. The BioHarness 3 facilitates quick assessment of an individual's health status so that work levels can be modified to reduce the risk of threats such as heat stress. The BioHarness 3 readings can be combined with a variety of other safety sensors in a detection and characterization procedure of hazardous atmospheres using ProRAE Guardian.

- Quick assessment of health status
- Reduce risk of heat stress by adjusting work levels
- Improve team efficiency
- Perform post-event analysis
- Low life-cycle cost with no consumable components

KEY FEATURES

- Measurement of heart rate, breathing rate, core body temperature, posture, and activity
- Remote viewing of real-time sensor readings on a PC within a 2-mile radius
- GPS sensor for tracking on a local map
- Continuous datalogging
- Quick setup and easy to use

APPLICATIONS

- HazMat & Emergency Response
- Confined Space Entry
- Environmental Remediation
- Industrial Cleanup
- Fire Overhaul
- Clinical Studies



BioHarness 3

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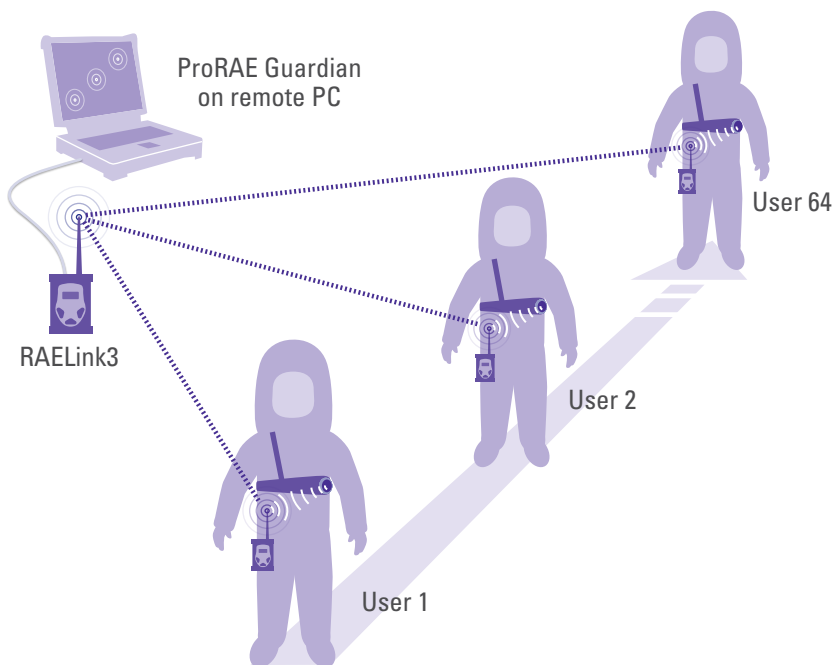
SPECIFICATIONS

Sensor Module Size	1.85" x 0.46" (28mm x 7mm)
Sensor Module Weight	0.635oz (18g)
Strap Fabric	Washable conductive smart fabric
Operating Temperature	-22° to 140° F (-30° to 60° C)
Humidity	0% to 95% relative humidity (non-condensing)
Battery	4.2V Li-Ion rechargeable
Run Time	12 to 28 hours
Charging Time	3 hours
IP Rating	IP-55
Wireless	Up to 2 miles (refer to RAELink3 datasheet for complete details)
GPS Accuracy (via RAELink3)	Within 5 meters

Sensors

Heart Rate	0 to 240 BPM (± 1 BPM)
Respiration	0 to 120 BPM (± 1 BPM)
Activity	(\pm) 16g in each axis (Vertical/Lateral/Sagittal)
Estimated Core Body Skin Temperature	91° to 106° F $\pm 2^\circ$ (33° to 41° C)
Posture	$\pm 180^\circ$

LIVE DATA TRANSMISSION



BIOHARNESS KIT COMES WITH:

- BioHarness 3 chest strap with shoulder support harness
- USB charging cable with AC adapter
- RAELink3 Kit
- Quick Start Guide
- CD with documentation



BioHarness Kit

BIOHARNESS TEAM KIT COMES WITH:

- Eight BioHarness 3 chest straps
- Four RAELink3 wireless modems
- Rugged carrying case
- Complete accessories



BioHarness Team Kit

BioHarness is a trademark of Zephyr Technology