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.

**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

- 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
**BioHarness 3**

Real-Time Portable Physiological Monitoring

### SPECIFICATIONS

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

#### Sensors

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Rate</td>
<td>0 to 240 BPM (±1 BPM)</td>
</tr>
<tr>
<td>Respiration</td>
<td>0 to 120 BPM (±1 BPM)</td>
</tr>
<tr>
<td>Activity</td>
<td>±15g in each axis (Vertical/Lateral/Sagittal)</td>
</tr>
<tr>
<td>Estimated Core Body</td>
<td>91° to 108° F ± 2° (33° to 41° C)</td>
</tr>
<tr>
<td>Skin Temperature</td>
<td></td>
</tr>
<tr>
<td>Posture</td>
<td>± 180°</td>
</tr>
</tbody>
</table>

### LIVE DATA TRANSMISSION

ProRAE Guardian on remote PC

RAELink3

User 1

User 2

User 64

### BIOHARNES 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 TEAM KIT COMES WITH:

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

**CORPORATE HEADQUARTERS**

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