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equivital™

☑ Military Training/Deployment

☑ Disaster Response

☑ Chemical, Biological, Radiological & Nuclear

☑ Counter Terror

☑ Hazardous Area Emergency First Response

☑ Oil & Gas/Mining

The Equivital Black Ghost system provides real time actionable data, from the human, within challenging and hazardous environments. Physiological data, geolocation and environmental data are combined to provide a critical overview on the team and individual safety and performance.

Military Training

Using Black Ghost for military training provides objective soldier performance data and heightened situational awareness, resulting in positive training outcomes. Black Ghost gives an immediate insight into the performance and welfare of all personnel during a training exercise. When tracked against baseline values, this data can be used to help monitor for heat stress and fatigue, highlight areas that need further development and assign future team roles.

CBRN

Using Black Ghost within a hazardous working environment, where worker safety is paramount, allows vital safety information to be tracked in real time during a mission or work task. Rapid therapeutic intervention or rescue can be carried out ahead of time ensuring welfare and productivity are managed effectively. Reviewing personnel data allows for evidence based validation of safe working practices and assists in development of new safety protocols.
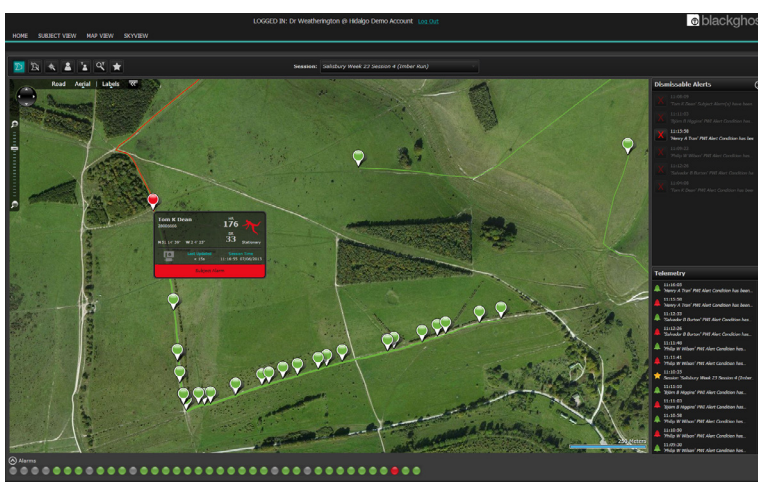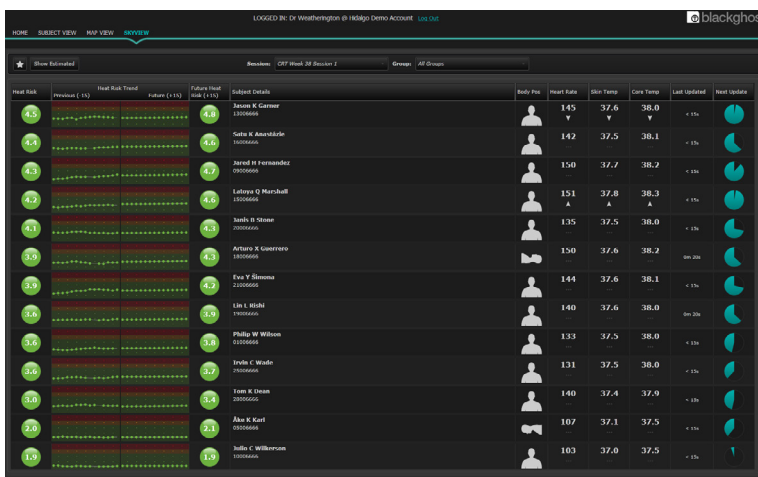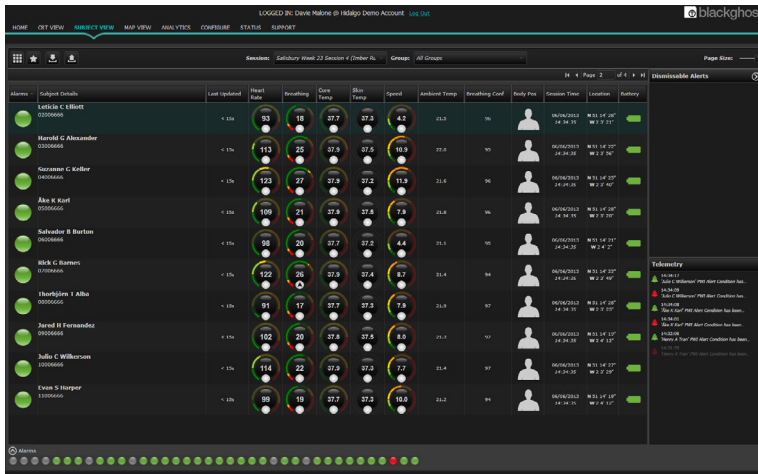
☑ Remote viewing of real time physiological data

☑ Interactive map for location tracking

☑ Customizable alerts including fall alert

☑ Track and predict heat injury

☑ Customizable analytics and after action review

☑ Designed for long term wear

☑ Web based or secure local deployment

☑ ATEX/Intrinsic safety approvals

☑ HIPAA compliant to manage human data

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Black Ghost Real Time Monitoring Interface

Black Ghost uses data sent from the Equivital LifeMonitor and other sources to present real time safety, performance and location data within easy to navigate user interfaces. The user can further contextualize live data with event markers relevant to the subject, group, location and/or timeline.
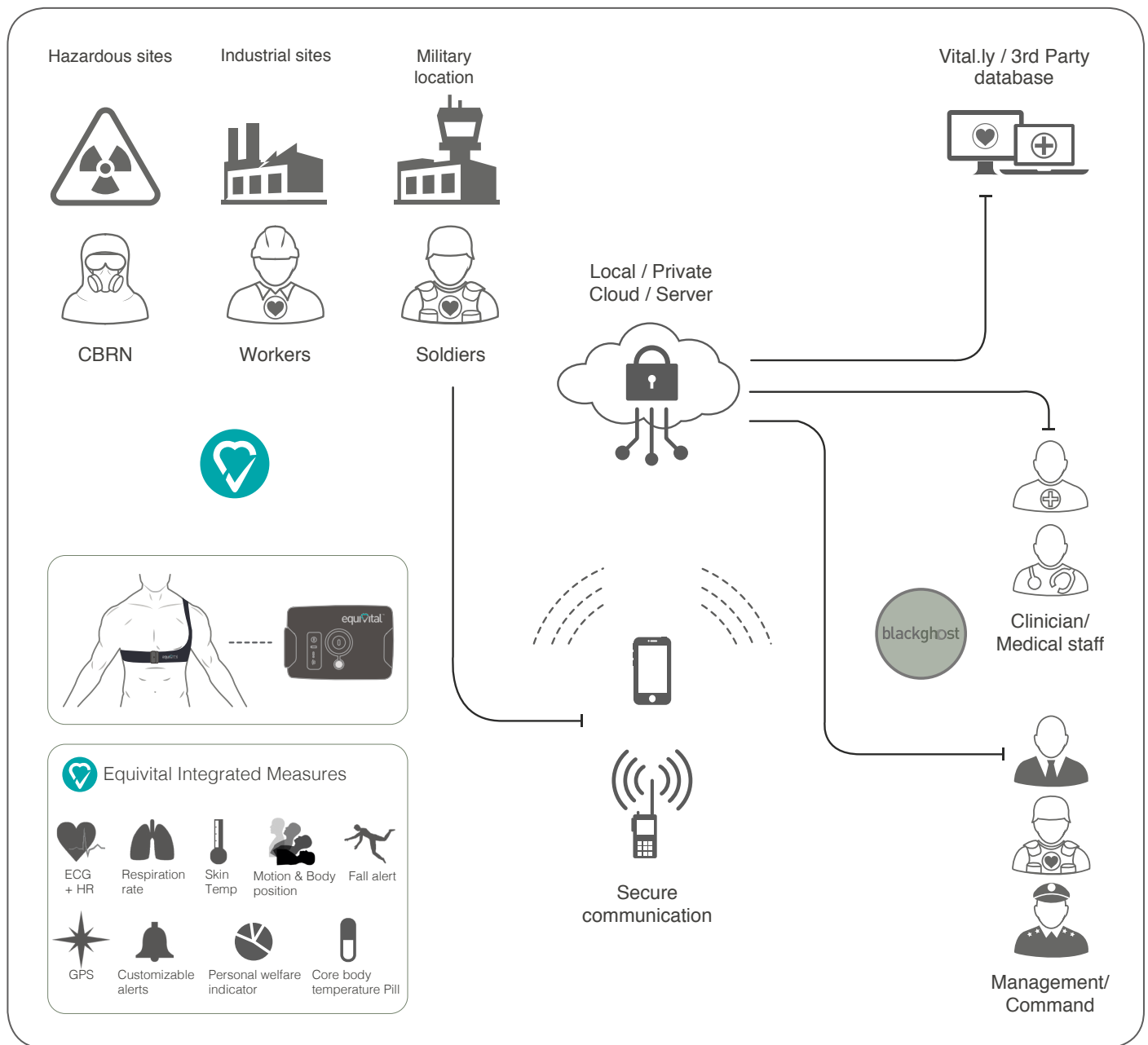
Black Ghost is highly configurable, allowing display and reporting of customized intelligence including predictive measures such as heat strain index.

- Monitor events as they happen

- Secure central monitoring of subjects from multiple locations

- Display of each subject's vital data and Physiological Welfare Index

- Real time interactive map with location, tracking and geofencing

- Automated alarms and alerts, including fall alarm, visible in all views

- Create & mark key events by subjects, groups, location and timeline

- Data accuracy and automated data confidence alerts/reporting

- Incorporation of external environmental data (such as weather), 3rd party sensors and algorithms for display of specific outcomes

- Configurable dashboards

- Remote multilevel user access

- Scalable, unlimited subject numbers

- Secure encrypted data

- Playback of events for after action review

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Black Ghost Architecture

Hazardous sites — CBRN

Industrial sites — Workers

Military location — Soldiers

Local / Private Cloud / Server

Vital.ly / 3rd Party database

Secure communication

Clinician/ Medical staff

Management/ Command

Equivital Integrated Measures

- ECG + HR
- Respiration rate
- Skin Temp
- Motion & Body position
- Fall alert
- GPS
- Customizable alerts
- Personal welfare indicator
- Core body temperature Pill

Black Ghost can use a variety of different communications medium including GPRS, WiFi, Tetra and other proprietary communication methods to create a real time online or private network. Black Ghost can be deployed locally within an organization's secure network or can be cloud based.

- ☑ Compatible with a variety of communications medium
- ☑ Configurable deployment architecture
- ☑ Multi-site architecture with centralized monitoring
- ☑ Multi-tiered user access controlling available features and functionality

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Equivital LifeMonitor Technical Specifications

Parameter:	EQ02 LifeMonitor Sensor Electronic Module (SEM)	EQ02 LifeMonitor Intrinsically Safe Sensor Electronic Module (SEM)
Size SEM (Overall Dimensions):	78mm x 55mm x 11mm	78mm x 55mm x 11mm
Sensor Electronic Module (SEM) Weight:	38g	60g
Sensor Belt Weight:	100g	100g
Power:	3.7V 300mA Lithium-Polymer rechargeable cell	3.7V 300mA Lithium-Polymer rechargeable cell
Li Polymer Recharge Time:	From Flat ~1hr	From Flat ~2hr
Operating Temperature:	-10°C to +50°C	-10°C to +40°C
Storage Temperature	-20°C to +55°C	-20°C to +55°C
Operating Humidity & Storage:	0% to 95% RH Non-Condensing	0% to 95% RH Non-Condensing
Battery Life:	Partial Disclosure – 14 hours (typical when logging in Bluetooth on mode)	Partial Disclosure – 14 hours (typical when logging in Bluetooth on mode)
Battery Life with an external battery pack:	51 Hours	N/A
Sensor Belt Duration of Continuous Use:	24 Hours	24 Hours
SEM Internal Memory:	8GB	8GB
Hazardous Area Classification:	Not Applicable	Ex ITS13ATEX27919X II 1 G Ex ia IIB T4 Ga
EU Classification:	Class IIb (SEM) Class I (Sensor Belt)	Class IIb (SEM) Class I (Sensor Belt)
FDA Device Classification:	Class II	Class II
IP Rating	IPx7	IPx7
Approvals	CE FC Part 15	CE FC Part 15