




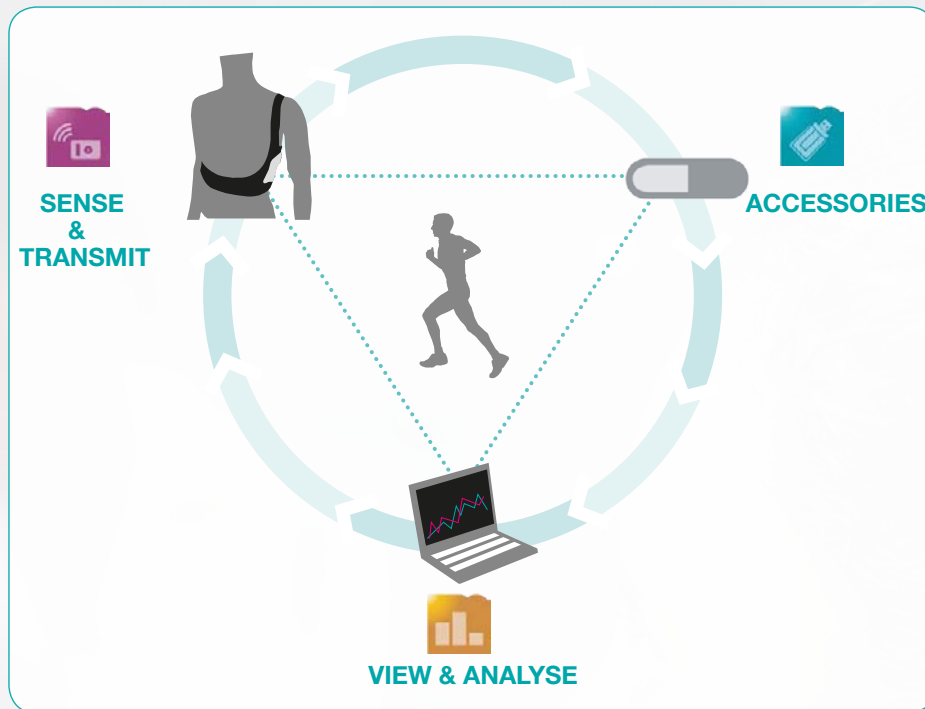
- ✓ Better Data
- ✓ Better Decisions
- ✓ Better Performance

## The Equivital™ TnR Product Range

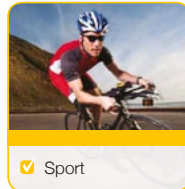
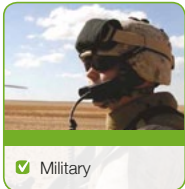
May 2013 - September 2013

## The Equival™ - TnR Product Range

Equival™ TnR Products combine world class human performance monitoring capability with robust clinical grade data quality. TnR Products fall into three categories:  Sense & Transmit  View & Analyse  Accessories



### Key Use Cases



✓ Military Thermoregulatory Research

✓ Performance Monitoring

✓ Research During Sleep

✓ Heat Stress Monitoring

✓ Algorithm Development

✓ Welfare Monitoring

Designed for use by real people in real environments, the products keep usability and flexibility at the fore, meeting broad end-user monitoring requirements.

Equival™ technologies have pioneered mobile human monitoring for almost a decade.

The TnR Product range brings these proven Equival™ technologies to users in the form of new sensor systems and software viewing & analysis tools.



# SENSE & TRANSMIT: Equival™ EQ02 LifeMonitor

The Equival™ LifeMonitor is a multi-parameter body worn sensor for logging and transmitting, in real time, mobile human performance data.

## EQ02 Sensor Belt

**Product code:** EQ-02-B1-1-S(SIZE), EQ-02-B2-1-S(SIZE)\*

The EQ02 Sensor belt features a system of sensors and electrodes embedded in novel textiles. It connects with the Sensor Electronics Module (SEM) to provide mobile monitoring capability.

Designed to be comfortable when worn for extended periods, the EQ02 Sensor belt enables high quality measurement of physiology even when the wearer is engaged in strenuous physical activity and rapid movement.

**Available sizes:**

1-9 (Circumference at xiphoid sternum: 29 – 47 in / 74 – 119 cm).

**Reference:**

LifeMonitor Item 1.1 within price list.

- ✓ Aesthetically designed for maximum comfort
- ✓ Light weight breathable fabric with almost seamless design
- ✓ Superior sensor stability for very high data quality



## EQ02 SEM

**Product code:** EQ-02-SEM-007

The EQ02 SEM is the world's leading multi parameter ambulatory monitoring device that senses, records, monitors and intelligently processes data captured from the human and is able to transmit this over a wireless or wired interface. Multiple parameters are measured including high resolution tri axis accelerometry (256Hz), ingestible core temperature pill and time synchronised photoplethysmography.

The EQ02 SEM is FDA and CE marked, weighs 38gm and is IP67 certified when connected with a sensor belt and has class 1 bluetooth interface. Available with or without external wired sensor or battery pack connector.

**Reference:**

LifeMonitor Item 2 within price list.

- ✓ Light weight and optimised for long wear comfort
- ✓ Up to 48hrs battery life in full disclosure logging mode<sup>1</sup>
- ✓ 8GB memory gives up to 50 days of data logging<sup>1</sup>

<sup>1</sup>Dependant on configuration

## Equival™ LifeMonitor Measurements & Alerts



ECG, HR, IBI



Body Position & Fall Alert



GPS\*



Customizable Alarms & Alerts



Respiratory Rate



Welfare Index



SpO<sub>2</sub> & PPG\*



Internal Storage



Core & Skin Temperature



Tri Axis Accelerometer



GSR\*



Bluetooth Connection

\*This model of the EQ02 Sensor belt features an external connector for wired ancillary sensors or enables connection to an additional external power pack.

\* Requires additional wired or wireless sensor.

## VIEW & ANALYSE: Software

Data can be viewed in real time or retrospectively using Equival™ viewing and analysis software tools.

The TnR Software range includes Equival manager, a data management and configuration tool, and the eqView Software suite for web, local and mobile access to subject data.



**Product Code:** EQ-SW-12

A PC application used for configuration of SEM's and Equival™ data management.

**Reference:** Software Item 5.1



**Product Code:** EQ-SW-EQV-P-1

A local or networked PC application used for monitoring subjects, viewing live data, trends and replaying logged data.

**Reference:** Software Item 5.2



**Product Code:** EQ-SW-EQV-MOB-A-1, EQ-SW-EQV-MOB-R-1

A mobile application used for viewing live data from a subject locally. eqView Mobile can also send data via GPRS, SMS or WI-FI to Equival web-based Applications (Currently versions for Android enabled phones).

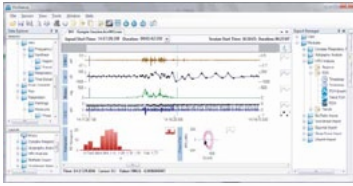
**Reference:** Software Item 5.4



## VIEW & ANALYSE: Software



# VIVONOETICS

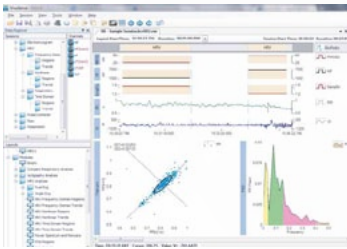


**Product Code:** EQ-SW-VS-01

VivoSense<sup>®</sup> for Equivalital<sup>®</sup> is an intuitive, fully customisable visualisation and discovery tool that enhances post-processing of data.

Includes: VivoSense<sup>®</sup> for Equivalital<sup>™</sup> (import module)

**Reference:** Software Item 6.1



**Product Code:** EQ-SW-VS-HRV-01

Advanced VivoSense<sup>®</sup> module provides support for users wanting to carry out HRV analysis

**Reference:** Software Item 6.2

## Equivalital<sup>™</sup> - Software Developers Kits



### Software Developers Kit

**Product Code:** EQ-SDK-URIN-0 & EQ-SDK-URIJ-01

Equivalital has a range of simple to use SDKs to suit applications across various operating systems.

The software developers kits are designed to allow developers of all capabilities the ability to embed Equivalital data into their own applications without expert knowledge or training. The EQ02 LifeMonitor SDK is a simple and cost effective way to integrate EQ02 LifeMonitor data into third party systems. Using simple, standard programming techniques any data recorded by the SEM can be integrated into any .NET or Java application with as few as four lines of code, including streamed ECG, accelerometer, breathing and PPG waveforms. The SDK can interpret data from live SEMs and from recorded SEM files or at high speed for analysis and post-processing. Note: an SDK license is required

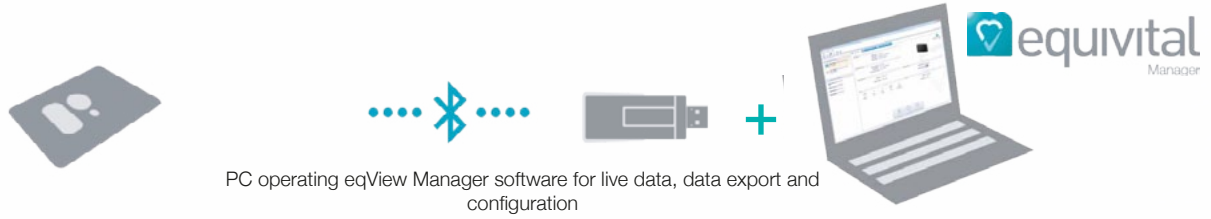
Equivalital works closely with equivalital partner program members using SDKs to help develop new application solutions. This ensures both parties benefit from each others support and expertise.

**Reference:** Software Item 7.1

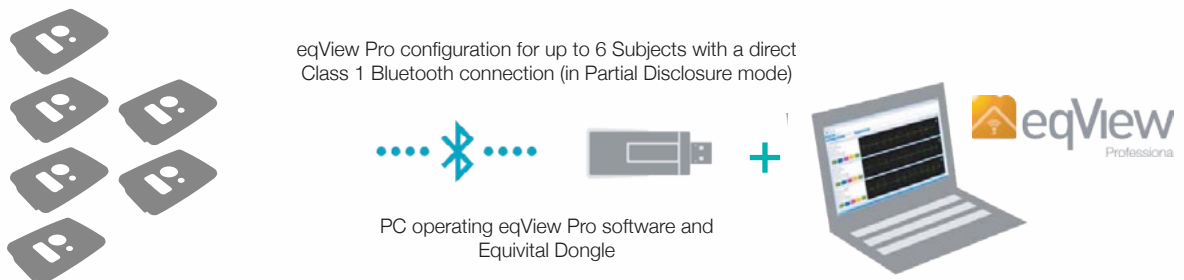


## VIEW & ANALYSE: System configurations

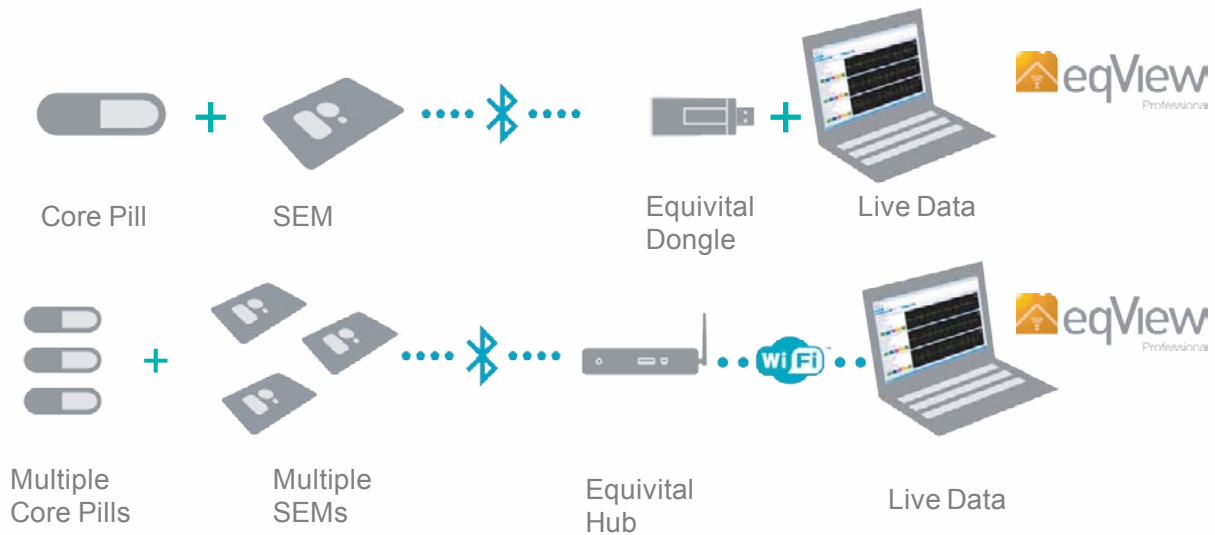
EQ02 Starter Kit system configuration for retrospective data analysis (Code EQ02-KIT-SU-2)



EQ02 Starter Kit (Multi User) system configuration for live data (Code EQ02-KIT-MU-2)



Configurations for live data to local PC with additional sensors



eqView Pro can be configured for up to 18 Subjects employing an Equivital™ Hub and PC operating eqView Pro software (in Partial Disclosure mode)



## ACCESSORIES: Equivital™ - LifeMonitor Accessories

### VitalSense® Core Temperature Capsule

**Product Code:** EQ-ACC-023

Ingestible core temperature capsule measures core body temperature and transmits readings to the SEM in real time.

**Reference:** Accessories 3.5



### VitalSense® Dermal Patch

**Product Code:** EQ-ACC-048

Self adhesive dermal temperature patch measures skin temperature and transmits data to the SEM in real time.

**Reference:** Accessories 3.4

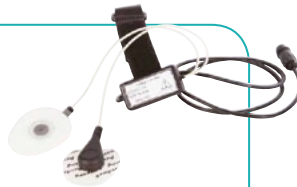


### EQ-GSR (Galvanic Skin Response Sensor)

**Product Code:** EQ-ACC-034\*

Wrist mounted sensor for measurement of galvanic skin response.

**Reference:** Accessories 3.7



### Equivital™ Hub

**Product Code:** EQ-ACC-032 (USA)  
EQ-ACC-032-V2 (ROW)

The Equivital™ Hub is a Bluetooth access point enabling communication with up to 18 SEMs<sup>1</sup> from a PC or LAN in real time. Networkable via WiFi or Ethernet connection. Operates with eqView professional software.

**Reference:** Communications 4



### EQ02 M-Dock

**Product Code:** EQ-ACC-MD-1

Enables simultaneous charging and 2-way data transfer communication with up to six SEM's.

5 M-Docks can be daisy chained to support 30 concurrent connections via two USB ports.

**Reference:** Accessories Item 3 within price list.



### External Battery Pack

**Product Code:** EQ-ACC-BAT-1

Provides up to 5 times operational life\*

**Reference:** Accessories 3.7



### EQ Core Temperature Capsule & Dermal Patch Activator

**Product Code:** EQ-ACC-029

Simply activates the core temperature capsule and the dermal temperature patch.

(Requires the use of a radio receiver or SEM to confirm capsule or patch activation).

**Reference:** Accessories 3.6



### Nonin Xpod®

**Product Code:** EQ-ACC-042\*

Low power connection to SEM for various compatible Nonin® sensor probes.

(Other sensors are not supplied by Equivital™)

**Reference:** Accessories 3.2



### Nonin iPod® SpO<sub>2</sub>

**Product Code:** EQ-ACC-041

Oxygen saturation probe with SEM connector and finger clip.

**Reference:** Accessories 3.3



### Equivital™ Bluetooth Dongle

**Product Code:** EQ-ACC-BTA-2

The first easy connection Equivital™ dongle which enables fast communication of 2 SEMs in full disclosure and up to 6 SEMs in partial disclosure directly to a PC in real time. Up to 100m range<sup>2</sup>.

**Reference:** Communications 4.1



### EQ02 SEM Lead

**Product Code:** EQ-ACC-SL-1

Enables simultaneous charging and 2-way data transfer with a single SEM.

**Reference:** Accessories 3.1



\*Requires EQ02 (B2) Sensor Belt – Product Code: EQ-02-B2-S(SIZE)

<sup>1</sup>Dependent on environment and number of SEM's in full or partial disclosure. <sup>2</sup>Subject to environment.

## Further information

If you require any further information about Hidalgo or Equivital™ please contact us at the address below:

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