

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

## The Equivital Training and Research (TnR) Product Range

June 2014 - September 2014

## 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



First Responder



Sport



Healthcare



Pharmaceutical



Vital Signs Monitoring



Activity and Energy  
Expenditure Research



Thermoregulatory  
Monitoring



Clinical Research



Sleep and Biorhythmicity



Human Performance  
Research

## Key Benefits



End to end solution for physiological sensing, data management and data visualisation



Pre synchronised and time stamped multiparameter data outputs save valuable time in data analysis



Access to raw ECG data for independent analysis of RR intervals



Easy check for real time data quality to ensure best results for your research



Increase subject compliance by measuring thermoregulatory, cardiorespiratory and energy expenditure data using just 1 lightweight device



Flexible configuration with accessory sensors to allow for use in multiple research studies



System supports multiple ingestible core temperature capsule measurements for improved mobile thermoregulatory monitoring



Streamlined, data management solution ensuring higher controls for data quality available for high volume or multi site



## SENSE & TRANSMIT: Equivital™ EQ02 LifeMonitor

The Equivital™ 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 xiphisternum: 29 – 47 in / 74 – 119 cm).

#### Reference:

LifeMonitor Item 1.1 within price list.



- ✓ Light weight breathable fabric with almost seamless design
- ✓ Superior sensor stability for very high data quality
- ✓ Washable



### EQ02 SEM

Product code: EQ-02-SEM-007

The EQ02 SEM is the world's leading multi parameter physiological monitoring device that senses, records, monitors and 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 and Sensor belt are IP67 certified and transmit data over Bluetooth. In addition the SEM can connect with other Bluetooth and wired sensors to receive data in and synchronise accurately with its native data stream.

#### 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>Dependent on configuration



### Equivital™ LifeMonitor Measurements & Alerts



ECG, HR, IBI



Body Position & Fall Alert



Customizeable Alarms & Alerts



Respiratory Rate



Welfare Index



Internal Storage



Skin Temperature



Tri Axis Accelerometer Energy Expenditure & Activity.



Bluetooth Connection



SP02 & PPG

Multi Site Skin Temperature



Blood Pressure

Core Temperature Capsule



GSR

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



## 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.

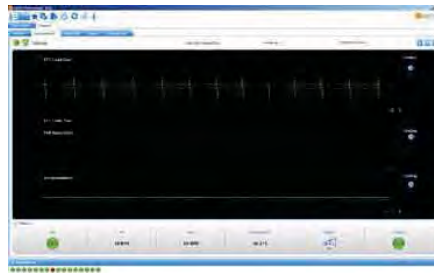
**Reference:**  
Software Item 5.1



**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

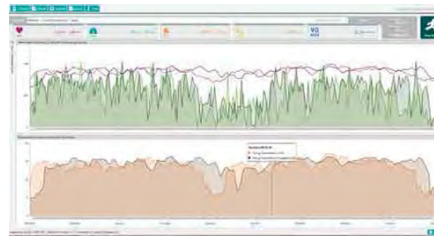
The Equivital™ LifeMonitor is a multi-parameter body worn sensor for logging and transmitting, in real time, mobile human performance data.

## activityModule

**Product code:** EQ-SW-ACT-LIC-01

The Activity Module is an analysis and reporting module that works with Equivital heart rate, breathing rate and accelerometer data to provide energy expenditure and activity analytics.

The Activity module supports subject specific attributes and follows a simple “Calibrate.Measure.Analyze” sequence of events.

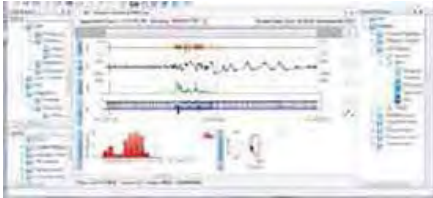


## qiosk

**Product code:** EQ-SW-OSK-01

The Equivital Qiosk is a streamlined subject, device and data management software tool which is configured specifically for your study needs.

Especially suited to studies with larger volumes of subjects or data, multiple sites or multiple site data management staff, Qiosk provides a simplified interface to ensure data security and integrity for clinical research.

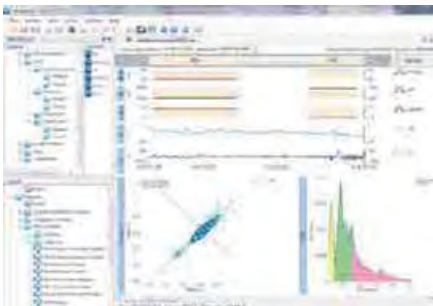


**Product code:** EQ-SW-VS-01

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

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

**Reference:** Software Item 6



**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 6.1

**Product code:** EQ-SW-VS-SAM01

VivoSense<sup>®</sup> Sync and Merge Module aligns data from the SEM with different data streams and sources and synchronizes them

**Reference:** Software Item 6.3

---

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



### Software Developers Kit

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

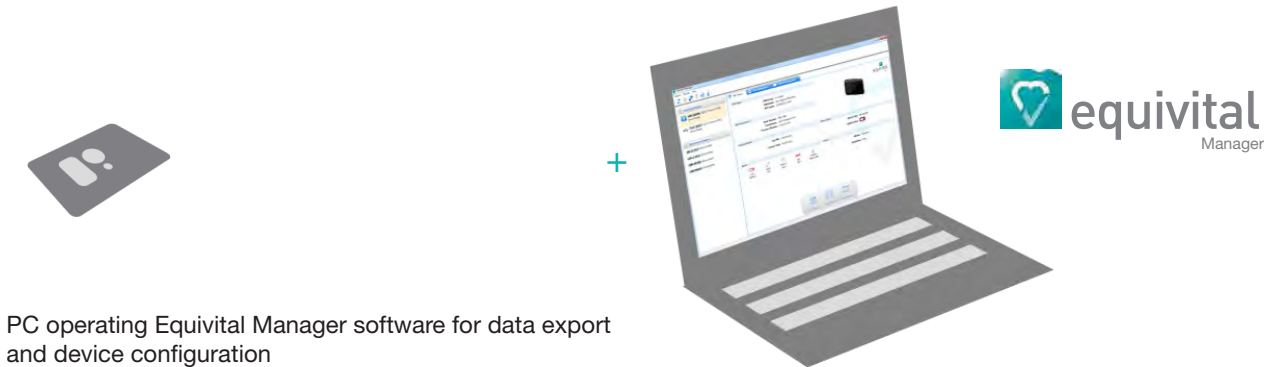
Equivital has a range of simple to use SDKs to suit applications across various operating systems.

The software developers kits are designed to allow developers of all capabilities the ability to embed Equivital 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

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

## VIEW & ANALYSE: System configurations

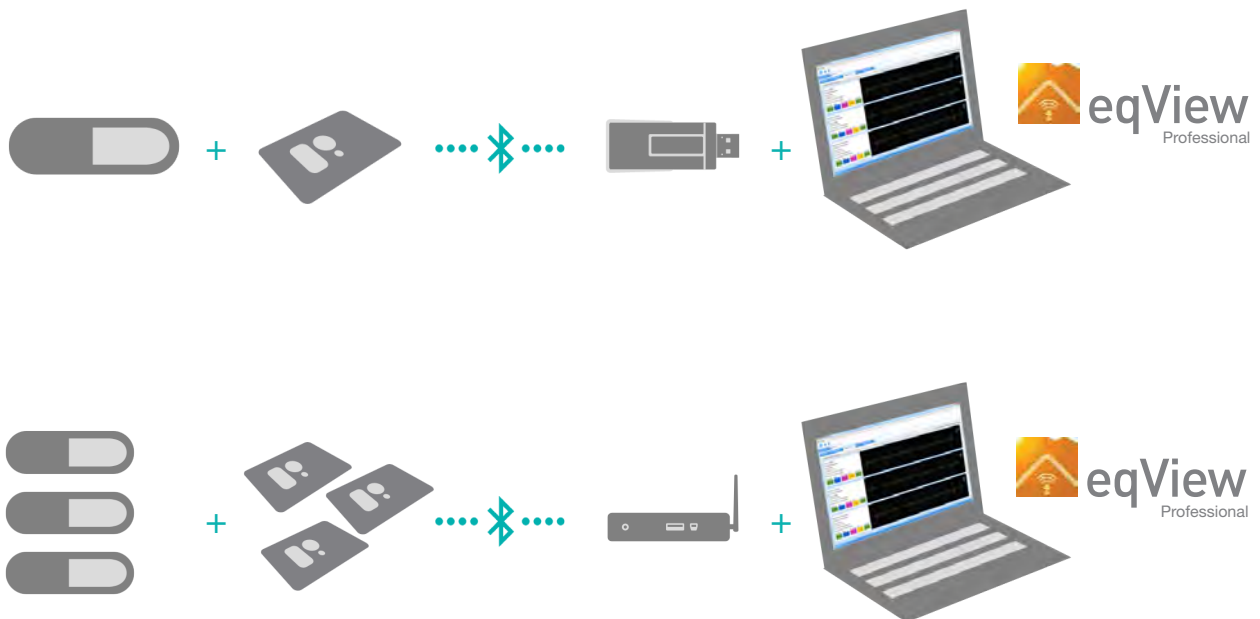
### EQ02 Starter Kit system configuration for retrospective data analysis Code (EQ02-KIT-SU-2)



PC operating Equivital Manager software for data export and device configuration

---

### 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 measure score body temperature and transmits readings to the SEM in real time.

Reference: Accessories 3.5



**VEQ 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 path activation).

Reference: Accessories 3.6



**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



**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



**EQ-GSR (Galvanic Skin Response Sensor)**  
Product code: EQ-ACC-034\*

Wrist mounted sensor for measurement of galvanic skin response.

Reference: Accessories 3.7



**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™ Hub**  
Product code: 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



**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 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.



**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



**External Battery Pack**  
Product code: EQ-ACC-BAT-1

Provides up to 5 times operational life\*

Reference: Accessories 3.7

\* 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.





## ACCESSORIES: Equival™ - LifeMonitor Accessories



### Omron Blood Pressure 708BT(EU)

Product code: EQ-ACC-052-BT

The Bluetooth blood pressure cuff measures subject blood pressure data, can be pre paired with a single EQ02 LifeMonitor and can send data to store or be transmitted on from the LifeMonitor.



### WristOx2 Bluetooth Oxygen Saturation (3150)

Product code: EQ-ACC-050-BT

The Bluetooth, wrist worn oxygen saturation monitor measures oxygen saturation, can be pre-paired with a single EQ02 LifeMonitor and can send data to store or be transmitted on from the LifeMonitor

## Further information

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

**Hidalgo Limited**  
Unit F, Trinity Court,  
Buckingway Business Park  
Cambridge  
CB24 4UQ  
United Kingdom

**T** +44(0) 1954 233430  
**F** +44(0) 1954 233431  
**E** [info@equivital.co.uk](mailto:info@equivital.co.uk)  
**W** [www.equivital.co.uk](http://www.equivital.co.uk)



**錫昌科技股份有限公司**  
新北市新店區寶中路113巷3號3樓  
TEL: 02-2911-5233 ; e-mail: [info@kyst.com.tw](mailto:info@kyst.com.tw)  
FAX: 02-2911-6855 ; WEB: [www.kyst.com.tw/hr](http://www.kyst.com.tw/hr)



Copyright © Hidalgo Limited. All rights reserved. All other company and product names maybe trademarks of their respective companies. While every effort is made to make sure the information shown is accurate, Hidalgo does not accept any liability for any errors or mistakes that may arise. Specifications and other information are subject to change without notice. All performance figures and other data contained in this document may vary by application.

Equival™ by Hidalgo - a Jaltek Group Company

HIDA3330-TNRPR-04-07