Golden Win3®

www.win3safety.com

AUREA BIO-WATCH

Personal Health and Environmental Monitor

The above image gives an overview of the default information that is displayed on the main screen during standard operation. All environmental parameters are displayed simultaneously. Biometric parameters can be accessed through a simple menu interface. In the event that any one of the parameters measured exceeds the preset alarm threshold, that parameter will appear on the main screen automatically with a visual alarm indication and vibrate alert. This is true for all environmental and biometric parameters.

FEATURES

- *Small and compact.*
- *Can be worn on the wrist or as a badge. Some features not available as badge.*
- *Measures ambient temperature.*
- *Measures relative humidity.*
- *Measures barometric pressure.*
- *Calculates heat stress index, wet bulb temperature and dew point.*
- *Measures up to 3 gases (flammable, toxic and VOC).*
- *Measures heart rate.*
- *Measures SPO2.*
- *Measures Carboxyhemoglobin levels in blood.*
- *Measures body temperature.*
- *Measures movement. Can detect freefall, impact and others.*
- *Data logging and downloading.*
- *Multi-color LED alarm function with vibrate alert.*
- *Inductive charging.*
- *Wireless connectivity. BLE in first release.*
- *Messaging possible with network coverage.*

SENSOR SPECIFICATIONS:

BIO SENSORS:

PULSE OXIMETRY

SpO2	+/- 4%	70%-100% of reading
COHb	+/- 3%	0% - 40% of reading

TEMPERATURE

BodyTemp	+/- 1 DegC	-20 DegC – 85 DegC

ENVIRONMENTAL SENSORS:

AIR MEASUREMENTS

Temperature	+/-0.5 DegC	15.0 DegC – 40.0 DegC
Temperature	+/-1.0 DegC	0.0 DegC – 60.0 DegC
Humidity	+/-3.5%RH	20%RH – 80%RH
Humidity	+/-5.0%RH	0%RH – 100%RH
Barometric pressure	+/- 1 hPa	260 hPa – 1260 hPa

GAS MEASUREMENTS

CH4	Range	1ppm – 10 000 ppm
CH4	Concentration slope	< 0.9(R5000ppm/R1000ppm) CH4
CO	Range	5ppm – 5000 ppm
CO	Concentration slope	(R50ppm/R150ppm) > 3.0
VOC	Range	1ppm – 500 ppm
VOC	Concentration slope	(R5ppm/R50ppm) > 3.0 ethanol

The device operation is unique and protected by an international patent. The environmental conditions around the individual as well as the actual health parameters of the individual wearing the device are monitored continuously. Thus any immediate threat to the health of the individual will be announced as an alarm condition.

If environmental temperature and humidity parameters go above preset limits, the core temperature of the user is also measured along with breathing and heart rate to determine possible heats stress exposure. If the user is exposed to high concentrations of CO in the environment, the level in the bloodstream of the user is also measured to determine possible Carbon monoxide poisoning.

If the user works in a lean oxygen environment, the SPO2 levels are monitored to warn the user of imminent danger.

MINING & INDUSTRIAL APPROVALS

MASC IEC IECEx Ex