

## HAVWEAR

A HAVS risk assessment monitor for use as part of the Reactec Analytics Platform

### Features and Benefits

The HAVWEAR monitor has been specifically designed to assess and monitor Hand Arm Vibration (HAV) risk exposure from hand tools.

The HAVWEAR is wrist mounted and calculates and displays in real-time either HSE HAVs risk tool exposure points based on a static tool vibration level or HAVs risk sensed exposure points based on vibration determined at the wrist. Therefore informing the wearer of their exposure to vibration.

Sound and vibration alerts also inform the wearer of incremental increases in exposure and action thresholds exceeded.



### Technical Performance

#### Temperature Range

Operating: -10°C to +35°C. Storage: -20°C to +40°C.

#### Memory

Up to 180 tool connections.

#### Communications

Close range inductive data communication (13.56MHz).

Mobile Application Communication: 4.2

#### Calibration

The HAVwear accelerometer's IC interface is factory calibrated for sensitivity (So) and Zero-g level (TyOff). Trimming values are stored inside the HAVWEAR module in a non-volatile memory and downloaded into the registers during each active operation, requiring no further calibration.

#### Battery

Internal lithium ion polymer rechargeable battery.

#### Charge Time

Charge time from fully discharged to 100% = 3 hrs

Charging time from shutdown voltage to 75% = 70 min

From shutdown voltage to charged sufficiently for release (8hr life or more) = 30 minutes

#### Battery Life

Up to 48 hours between charges

Up to 36 hours when Bluetooth functionality is enabled.

1000 full charging cycles.

#### Storage

Max 6 months when battery fully charged. Store in a cool dry place away from direct sunlight.

#### Standards

EN302 291-2 Close Range Inductive data communications operating at 13.56MHz.

EN301 489-1, EN 301 489-3, EN302 291-2, EN61326-1 EMC, EN 300 328 V2.1.1

EN61010-1 Electrical Safety.

EN 60529 / IEC 529. Ingress protection to IP67.

#### Dimensions

37mm x 38mm x 15mm.

#### Weight

38g.

#### LCD Screen Size

17mm.

## HAVWEAR

### System components

#### HAVWEAR Tags

HAVWEAR Tags are sticky backed labels attached to tools and contain tool information and tool vibration levels.



#### Docking Station

The Docking station provides data archiving, transmission of data to the Reactec Analytics platform and charges up to 15 HAVWEAR monitors. HAVWEARS are assigned to operators using personalised RFID cards.



- Dimensions: 338mm \* 180mm \* 50mm
- Weight: 1025g
- IP Rating: IP20
- Operating Temperature Range: 0°C to +40°C
- Storage Temperature Range: 0°C to +40°C
- Memory: 10 years
- RFID reader (13.56MHz) for reading operator cards
- 2G GPRS module for server communication
- Mains adaptor
- Power: 12VDC

#### HAVWEAR Wrist Holder

The HAVWEAR wrist holder comprises of two parts - monitor holder and wrist strap.



#### HAVWEAR device

A device that assess, calculates and informs the wearer of their exposure points and levels.



#### Reports

The Analytics Software is a cloud-based software application to view and analyse HAV exposure reports from data collected by the HAVWEAR.

