# Technical Specification – HVW-002



## **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 and provide proximity alerting for social distancing and hazard exclusion zone applications.

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.

The HAVWEAR communicates with other REACTEC devices via Bluetooth to establish range and identity to facilitate social distancing and hazard detection.

Sound and vibration alerts inform the wearer of incremental increases in exposure, action thresholds exceeded or proximity breaches.



### **Technical Performance**

**Temperature Range** 

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

Memory

Up to 202 data records.

**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 Bluetooth disabled Up to 36 hours Bluetooth enabled for live data Up to 12 hours Bluetooth enabled for proximity 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.

# Technical Specification – HVW-002



## **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: 1025gIP 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 adaptorPower: 12VDC



### **HAVWEAR Wrist Holder**

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

### **HAVWEAR** device

A device that assesses, calculates and informs the wearer of their exposure points and levels. HAVwear to HAVwear proximity informs wearers of social distancing contact events and exclusion zone breaches.

### **Reports**

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



For more information call: 0131 221 0930 or email: sales@reactec.com

Document 290-131-05

www.reactec.com