

HAVSensedesktop

model: HA-DT5

Hand-Arm Vibration monitoring made easy



The HAVSense desktop is a compact system for the monitoring and reporting of Hand Arm Vibration dosage levels (HAVS). The mains powered docking station operates in combination with an existing computer, via a USB connection, providing complete control over the HAVSense Dosimeters charging, deployment, sampling and reporting using the HAVSense monitoring software package.

The risk of personal injury from exposure to excessive levels of vibration is well documented. In particular, high levels of hand-arm vibration from powered hand tools are known to cause Hand-Arm Vibration Syndrome (HAVS), otherwise known as vibration white finger (VWF) or Raynaud's disease. Left unchecked and untreated, serious injury including amputation of the fingertips could result.

HAVSco has developed a totally unique solution that measures the actual vibration dose inflicted on the hand, and provides a visual indication if the HSE action or limit values are exceeded. Using the HAVSense personal vibration dosimeters, you can record accurate, personal hand arm vibration data continuously throughout the workday on multiple workers, reliably, conveniently and with minimal disruption to the operator, even when using multiple power tools for different operations.



A unique HAVS monitoring concept

Worn under the glove on either hand, the HAVSense Dosimeter monitors, measures and records the **actual** vibration dosage entering the operator's fingers/hands and therefore accurately and reliably meets requirements for 'on the job' HAVS monitoring.

No guesswork, no calculation, no estimating, no reliance on inconsistent vibrating equipment characteristics... just real, actual, measured hand arm vibration dosage readings, recorded every second of the operators working day. Displayed in a choice of graphical formats including HSE points showing each operators personal daily HAVS exposure archived for retrieval by the organisations health and safety officer/health professional.

HAVSense Desktop features:

- Includes 5 (3 axis) HAVSense Dosimeters worn under the glove
- Docking station with 5 Dosimeter ports
- HAVSense software monitoring package
- Assigns Dosimeters to named personnel
- Automatically downloads HAVS data for further analysis and archiving
- Automatically recharges the HAVSense Dosimeters
- USB connection to external computer
- Mains powered system

The HAVSense three axis dosimeter provides an ideal method for monitoring Hand Arm Vibration in that it conforms to the dosage calculation requirements of the Physical Agents Directive, of ISO 5349, of ISO 8041-2005 and the EU Directive 2002/44/EC.

HAVSco
vibration monitoring systems
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HAVSense Dosimeter features

Measurement	Acceleration along 3 orthogonal axes (ms ⁻²)
Measurement range (RMS)	0.18 to 180ms ⁻² (overload clips peak at 254ms ⁻² without hysteresis or lag)
Measurement range (frequency)	5Hz - 1.6kHz
Hand-arm frequency weighting	Wh as defined by ISO 8041: 2005
Measurement results	Daily vibration exposure A (8) or Ahwx, Ahwy, Ahwz, HSE exposure points, overload per cent time
Data recorded	Time history logging: once per second (sum or x, y and z axes plus overload time per cent)
User identification	On-board, programmed from HAVSense Dock
LED indicator	Normal operation 1 flash every 4 seconds Reaching action level of A(8) 1 flash per second Reaching limit level of A(8) 4 flashes per second Overload 3 flashes in rapid succession
Charge time	3.5 hours typical
Battery life (between charges)	At least 12 hours from full charge during normal use
Temperature range (operating)	-10 to +40C
Temperature range (charging)	0 to +40C
ATEX/Intrinsic Safety certification	II 1G Ex ia IIB T4 GA (pending) II 1D Ex ia IIC T99C IP64 Da I M1 Ex ia I Ma
IP rating	IP67
Electrical safety	IEC 61326-1:2005: electrical equipment for measurement control and laboratory use - EMC requirements IEC 61010-1:2001: safety requirements for electrical equipment for measurement control and laboratory use - part 1:
Weight	23gms.
Overall dimensions	45H x 24W x 37D mm
Standards compliance	CE ISO 8041: 2005

HAVSense Dock features

Number of ports available for simultaneous management	Five (5) HAVSense Dosimeter ports
Keypad and illuminated LCD screen	Assigns Dosimeter by PIN and displays HSE points Green HAVSense connected Amber HAVSense charging (flashing) or fully charged Red Error Red + amber + green Flashing - HAVSense ready to deploy
Interface to external computer	USB communication connection for transfer of HAVS data to external computer
Power source	External 110V/230V (mains supply adapter)
Temperature range in normal use	0C to +50C
Electrical safety	IEC 61326-1:2005: electrical equipment for measurement control and laboratory use -EMC requirements IEC 61010-1:2001: safety requirements for electrical for measurement control and laboratory use - part 1: general
Weight of system	2.2 Kg gross approx.
Overall dock dimensions	60H x 190W x 170D mm.
Standards compliance	CE EN61010-1 Installation Cat II , Pollution degree 2 EN55022 RF Emissions EN61326 Immunity Table 1, Performance criteria B.