InnoMeter® HVM 20283 1.9
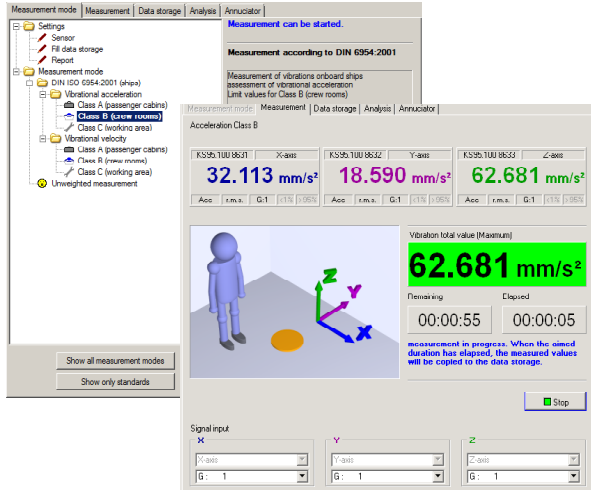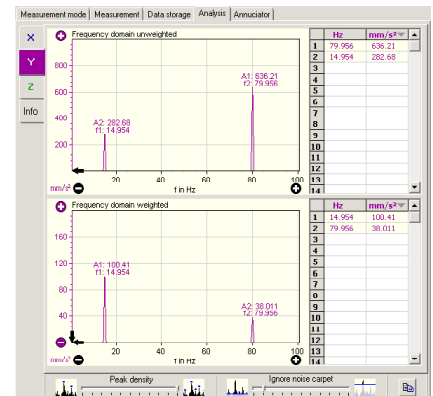
Vibration Measurement on Ships

Clearly arranged selection and execution of the measurement

Automatic data storage

Integrated frequency analysis

Application

Aboard passenger and merchant vessels vibrations can occur, which may negatively interfere with the work of the crew or which may diminish the comfort of passengers and crew. In order to assess complaints or to prevent them, measurements acc. to ISO 20283-5 are suitable, since they allow the evaluation of the vibration severity with regard to habitability aboard ships.

By using the InnoMeter HVM20283 one can easily perform these measurements conforming to standards. Additionally, the instrument contains a storage for recent measurement results.

Properties

Compared to usual hand-held instruments, the InnoMeter HVM 20283 possesses a user guide. The user is guided through measurement from the choice of measurement mode to the evaluation of measurement's results. Graphical drawings for sensor positioning ease multiaxial measurement and ensure a correct application of the standard.

Acc. to the standard, the InnoMeter 20283 is designed for simultaneous measurement in all 3 axes. The required vibration parameters and weighting filters are integrated. The classification defined in the standard (passenger cabins, crew rooms, working areas) is available together with the respective standard values. With the simple choice of the measurement mode, the parameters and standard values are adjusted automatically acc. to the standard.

Remarks about the measurements can be noted, measurements can be saved and read into again.

The Pro-Version additionally includes frequency analysis for both, the unweighted vibration signal and the signal weighted acc. to considerations concerning occupational health. This way, responsible components are quickly detected and vibration causes are eliminated purposefully.

IDS Innomic Schwingungsmesstechnik GmbH

Technical Data

	InnoMeter HVM 20283-5 Pro	InnoMeter HVM 20283-5
Signal Processing		
Filter	W_m filter acc. to the standard	
Measurand	Vibration acceleration or vibration velocity	
Unit	mm/s², mm/s	
Parameters	Interval rms value	
Measurement duration	Adjustable 1 s .. 1 day	
Graphical Presentation		
Numeric Display	5 digits: 0.0001 .. 99999	
Refresh	1.. 4 times per second *	
Status Indicators	Sensor, measuring channel, measurand, parameter, gain, underload, overload	
Data Acquisition, Storage, Presentation		
Measurement Modes	- Vibration measurement acc. to ISO 20283-5 - Evaluation acc. to class A,B or C	
Measurement	- User guide - Choice of the measurement mode - Indication of elapsed and remaining measurement duration - Indication of the interval rms value for all axes - Indication of the vibration total value	
Data Storage	- Saving up to 100000 measurements - Indication of measurement mode, selected parameters as well as a verbally expressed assessment (good, acceptable, bad) - Indication of detailed data for the marked measurement - For each measurement, remarks can be noted - Save and reload measured values in CSV format - Printing a report about the meausrement, individual report examples can be configured	
Frequency Analysis	- Separate analysis for each measurement - Analysis already carried out while measuring - Analysis for each measurement is saved - Frequency resolution 1 Hz - Automatic amplitude recognition - Zooming and scaling	-
Event Annunciators		
Display	Display of total vibration value as well as evaluation of single measurement in traffic light colors	
Radio Switch	Binary signaling of single measurement's evaluation (good/bad)	
Digital Output	Binary signaling of single measurement's evaluation (good/bad)	
E-Mail	Transfer of total vibration value as well as evaluation of single measurement	
Miscellaneous		
Available in a Kit	VMSet-16	
General Functions	module is cloneable	

* Centrally managed in InnoMaster