Datasheet

OVERVIEW

HI 803/813 portable vibration shakers are designed to be used in the field or shop to verify the performance of vibration transducers, connectors, cabling, instruments or permanently installed condition monitoring systems. Both models are battery-powered, portable and feature a built-in reference accelerometer and indicator with calibration traceable to the National Institute of Standards and Technology (NIST).

These shakers can easily check velocity transducers, accelerometers and non-contacting Eddy Probe displacement measurement systems. Simply attach the transducer to the shaker head (displacement probes require a mounting fixture and target), set the shaker to a known vibration reference level, and verify readings. The reference test level can be set in acceleration, velocity, or displacement, English or Metric.

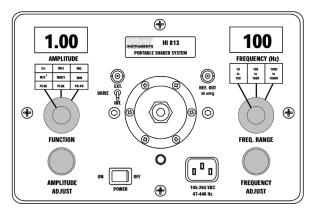
FEATURES AND BENEFITS

- Actual precision vibration testers
- True and accurate testing of vibration sensors
- NIST traceable calibration reference
- High-level vibration accuracy
- · Variable frequency and adjustable vibration amplitudes
- Rapid set-up for all vibration conditions
- · Battery operated
- Ability to "take the calibration lab to the field"

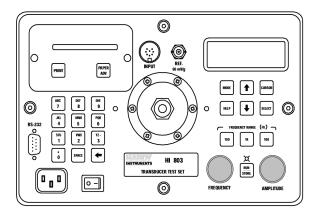
APPLICATIONS

- Loop checks of vibration monitoring systems
- Verification and testing of velocity transducers, accelerometers, eddy current probes, etc.
- Troubleshooting of issues in vibration monitoring loops
- Calibration of portable vibration analyzers
- Confirmation of vibration alarms





HI 813 Panel



HI 803 Panel



SPECIFICATIONS

	HI 803	HI 813	
Battery Type	Sealed, rechargeable	Sealed, rechargeable	
Charger	Internal Specify 120 or 240 Vac	Internal 120 or 240 Vac	
Frequency Range Acceleration Readout (<u>+</u> 1 digit)	10 to 10,000 Hz 10 to 2,000 Hz, ±.3 dB 2,000 to 10,000 Hz, +1 dB	25 to 10,000 Hz 30 to 1,000 Hz, <u>+</u> .3 dB 1,000 to 10,000 Hz, +1 dBW	
Velocity Readout	10 to 500 Hz, +.3 dB	30 to 500 Hz, +.3 dB	
Displacement Readout	25 to 200 Hz, +.3 dB	30 to 100 Hz, +.3 dB	
Maximum Output	10g at 100 Hz, 100 gram load (3g above 1,000 Hz) 1g at 100 Hz, 750 gram load	10g at 100 Hz, 100 gram load (3g above 1,000 Hz) 1g at 100 Hz, 750 gram load	
Calibration	NIST traceable stan- dard	NIST traceable standard	
Waveform Distortion	<5% THD, 30 to 2,000 Hz	<5% THD, 30 to 2,000 Hz 750 grams vertical or horizontal	
Maximum Unsupported Load	750 grams, vertical or 500 grams, horizontal		
Physical Size & Weight	11"W x 7"D x 10"H, 21 lbs.	11"W x 7"D x 10"H, 19 lbs.	
Sensor Mounting Thread	1/4-28 thd hole, 1/4" deep	1/4-28 thd hole, 3/8" deep	
English & Metric Readout	Yes	Yes	
Indicates Test Sensor Output	Yes, normalized sensitivity mass loading compensation, phase	No	
Internal Memory	Yes, stores test data	No	
Built-in Printer	Yes, thermal type, prints current or stored test data	No	
RS-232 Output	Yes, stored data transfer	No	

ACCESSORIES

PART NO.	DESCRIPTION	
6006-0008	Power Cord, AC	
2824-0135	Screw, 1/4-28X	
0228-0071-01	Mounting Fixture, Accelerometer	
5407-0001	Screwdriver, Flat Blade	
0202-0072-01	Communication Software	
0215-0183-01	Charge Cable	
2112-0007	Cable Connector Kit, HI 803 input from TUT	
0215-0129-01	Cable, Portable Shaker to 2-pin HI 113 Accel	
6006-0008	Power Cord, AC	
0228-0070-01	Stud, 1/4-28 to 1/4-28 UNF	
0228-0070-03	Bushing, 1/4-28 to 2-56 UNC	
0228-0070-04	Bushing, 1/4-28 to 6-32 UNC	
0228-0070-05	Bushing, 1/4-28 to 10-32 UNC	
0228-0071-02	Velocity/Universal Transducer Adapter, w/ screw	
0228-0072-01	Wrench, Shaker Head	

NON STANDAR	NON STANDARD ACCESSORIES		
HI-223-M (Metric Units) HI-223-E (English Units)	Eddy Current Probe Test Kit with Micrometer- fits HI 803 or HI 813 only		
HI-224	Eddy Current Probe Test Kit without Micrometer		
0205-0049	Mounting Spacer		
0228-0136-01	Mounting Plate, Magnetic 2" Dia, 1/4" thick		
1901-0057	Paper, Thermal Printer (Seiko p/n 201-211- 25C) HI 803 Calibration Kit		
0228-0141-01	Stud, 1/4-28 to M8 (Metric)		
0228-0137-01	Adapter stud. 1/4-28 UNF to 3/8-24 (HI 5701VT)		
0228-0075-01	4140 Steel Target (incl w/ 223/224 kits)		
0228-0071-02	Velocity/Universal Transducer Adapter, w/ screw		

HOW TO ORDER

MODEL	DESCRIPTION	CERTIFICATIONS	
HI 803-120V	Portable Shaker, variable frequency and amplitude control, manual and sensitivity modes (sensitivity mode tests the transducer and provides a mV/unit output to compare with the sensor manufacturer's specifications), built-in self-test program, built-in printer with paper, data storage, RS-232 port and data transfer software, 120V, standard accessories.	ompare with the sensor vith paper, data storage,	
HI 803-240V	Same as the HI 803-120V, except the voltage requirement is 240 volts.		
HI 813	Portable Shaker, variable frequency and amplitude control, 115/220V, standard accessories.		

