

SB100 Ultrasonic Bump Tester



General Monitors

The **SB100** is a hand-held battery-operated rechargeable ultrasonic tester designed to bump test GM ultrasonic gas leak detectors. The instrument is equipped with a high-energy, ultrasonic radiation source that emits sufficient acoustic energy to activate detectors up to 18 meters away.



Description

When used with the OBSERVER-i in Enhanced mode, the detector recognizes the SB100 sound signature and displays the function verification status.

The SB100 is useful for quick tests where physical access to the detector can be difficult. For more complete test and calibration of ultrasonic gas leak detectors, the 1701 Portable Test and Calibration Unit should be used.

Features & Benefits

Features	Benefits
Long activation range function test	Eliminates the need for climbing ladders or building scaffolds to bump test the detector
Explosion proof design	May be used in hazardous locations without requiring hot work permits
Portable equipment	Easy to carry on site
5-hour battery life	Allows for several ultrasonic gas leak detectors to be tested before recharging

Applications

- Floating Production Storage and Offloading Vessels (FPSOs)
- Gas Compressor and Metering Stations
- Gas Storage Facilities
- Gas Turbine Power Plants
- Hydrogen Storage Facilities
- LNG / GTL Trains
- LNG Re-gasification Plants
- Offshore & Onshore Oil & Gas Installations
- Petrochemical Processing Plants
- Refineries
- Underground Gas Storage Facilities



The Safety Company

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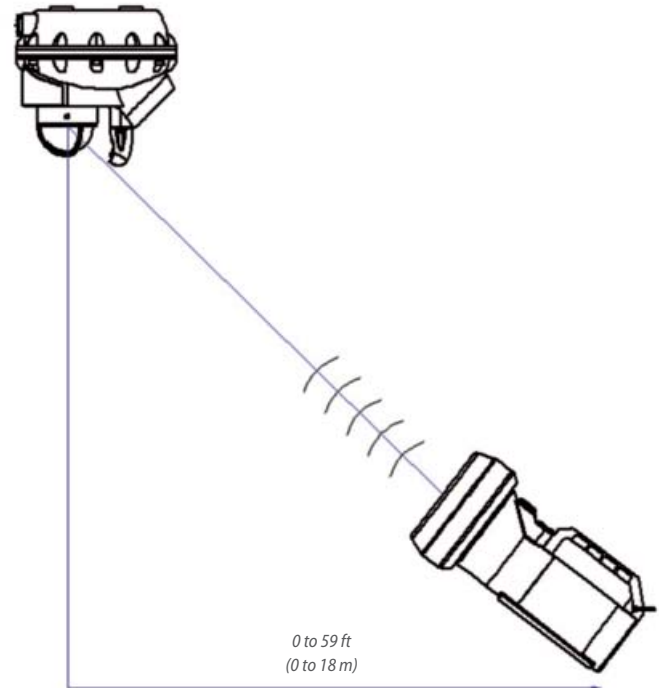
Technical Specifications

System Specifications	
DETECTORS TESTED	OBSERVER-i, OBSERVER-H, Surveyor, EX-5, IS-5
TEST ACTIVATION DISTANCE	0–18 meters (0–59 feet)
ACOUSTIC OUTPUT TOLERANCE	±5 dB
ANGLE OF REGARD	±5° relative to facing detector
APPROVALS CLASSIFICATION	ATEX/IECEX/CSA: Ex d ia IIB+H2 T4 Gb, Ex ia tb IIIC T135° C Db (Ta = –20° C to +50° C) CSA: Class I, Div. 1, 2 Groups B,C,D; Class II, Groups E,F,G; Class III, T4 (Ta = –20° C to +50° C)
APPROVALS	CSA, ATEX, IECEX, CE
WARRANTY	2 years
ACCESSORIES	Battery charger, Shoulder strap
Electrical Specifications	
INPUT VOLTAGE	12 VDC, 10 W max
CHARGER INPUT VOLTAGE	110–240 VAC, 50/60 Hz @ 1.5 A
CHARGER OUTPUT VOLTAGE	18 VDC max @ 1.8 A
CHARGING TIME	3.5 h max
EMC	EN 61000-6-2, EN 61000-6-4
Environmental Specifications	
OPERATING TEMPERATURE	–4° F to 122° F (–20° C to 50° C)
STORAGE TEMPERATURE	–4° F to 140° F (–20° C to 60° C)
CHARGING TEMPERATURE	32° F to 104° F (0° C to 40° C)
OPERATING HUMIDITY	0–95% RH, non-condensing
Mechanical Specifications	
HOUSING	Aluminum
DIMENSIONS	13 in L x 5 in D (330 mm L x 127 mm D)
WEIGHT	7.9 lbs (3.5 kg)
INGRESS PROTECTION	IP66, Type 4X
Ordering Information	
PART NUMBER	SB100-1000

SB100 Range Testings

Test Range Distance	Average Sound Level Reading* +/-5 dB
13 ft (4 m)	88
20 ft (6 m)	82
26 ft (8 m)	78
33 ft (10 m)	74
39 ft (12 m)	70
46 ft (14 m)	68
52 ft (16 m)	64
59 ft (18 m)	60

* As tested on the OBSERVER-i, OBSERVER, Surveyor, MSA EX-5, and MSA IS-5. The SB100 cannot be used for calibration purposes. The table above does not correspond to real gas leaks. The 1701 Portable Test and Calibration unit should be used for accurate, traceable testing on GM ultrasonic gas leak detectors.



Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products. Specifications subject to change without notice.



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Corporate Headquarters:
MSA – The Safety Company
1000 Cranberry Woods Drive
Cranberry Township, PA 16066
United States
+1-724-776-8600
info.us@MSAsafety.com

Additional locations can be found on our web site:
www.MSAsafety.com

Design Centers:
General Monitors
26776 Simpatica Circle
Lake Forest, CA 92630
United States
+1-949-581-4464
info.gm@MSAsafety.com

General Monitors
Ballybrit Business Park
Galway
Ireland
+353-91-751175
info.gmil@MSAsafety.com