



Clear Speech

Sensear's new SM1 and SM1x (Bluetooth®) range of earmuffs feature Sensear's world-first unique **SENS™** technology (Speech Enhancing Noise Suppression) for high quality clear speech communication and optimum hearing protection in high noise environments and across all classes of noise.

Communication Innovation

Introducing the latest advance in communication and optimum hearing protection for high noise environments.

The Sensear SM1 and SM1x (Bluetooth®) earmuffs have been designed for comfort, quality and endurance in the field, enabling clear, safe communication above 85dB(A) without the need to remove hearing protection.

Sensear's SM1 and SM1x earmuffs feature **SENS™** technology, a radical innovation unique to Sensear products and the latest and most effective advance in the fight to eliminate Noise Induced Hearing Loss (NIHL) recognised by the World Health Organisation as the most common occupational illness globally.

Attenuation Data

SM1 Hearing protector **CLASS 5** tested to AS/NZS 1270:2002. When Selected, used and maintained as specified in AS/NZS 1269, this protector may be used in noise up to 113dB(A) assuming an 85dB(A) criterion. A lower criterion may require a higher protector class.

Attenuation Data		SM1 Headband model							SLC _{B0}
F(Hz)		125	250	500	1000	2000	4000	8000	
Mean Attenuation (dB)		18.3	21.2	26.1	28.3	32.0	37.3	40.0	28dB
Standard Deviation (dB)		3.7	3.4	2.9	2.1	4.1	3.1	4.0	
Mean minus Standard Deviation (dB)		14.6	17.8	23.2	26.2	27.9	34.2	36.0	

Tested according to ANSI S3.19-1974

Attenuation Data		SM1 Headband model									
F(Hz)		125	250	500	1000	2000	3150	4000	6300	8000	NRR
Mean Attenuation (dB)		21.1	25.5	29.9	32.9	34.7	41.2	39.7	41.1	41.8	25dB
Standard Deviation (dB)		4.1	3.0	3.2	2.8	3.8	3.1	3.4	3.4	2.4	
Real-Ear Protection (dB)		12.9	19.5	23.5	27.3	27.1	35.0	32.9	34.3	37.0	

SM1 Helmet Hearing protector **CLASS 4** tested to AS/NZS 1270:2002. When Selected, used and maintained as specified in AS/NZS 1269, this protector may be used in noise up to 109dB(A) assuming an 85dB(A) criterion. A lower criterion may require a higher protector class.

Attenuation Data		SM1 Helmet model							SLC _{B0}
F(Hz)		125	250	500	1000	2000	4000	8000	
Mean Attenuation (dB)		15.9	18.4	23.0	25.7	30.6	34.7	34.3	24dB
Standard Deviation (dB)		7.0	5.4	4.9	3.5	4.2	4.2	4.1	
Mean minus Standard Deviation (dB)		8.9	13.0	18.1	22.2	26.4	30.5	30.2	

Tested according to ANSI S3.19-1974

Attenuation Data		SM1 Helmet model									
F(Hz)		125	250	500	1000	2000	3150	4000	6300	8000	NRR
Mean Attenuation (dB)		20.0	24.2	28.2	30.7	32.6	37.2	38.4	38.7	38.7	23dB
Standard Deviation (dB)		4.3	3.9	3.7	3.1	3.0	3.4	3.7	3.4	2.7	
Real-Ear Protection (dB)		11.4	16.4	20.8	24.5	26.6	30.4	31.0	32.1	33.3	

Replacement Parts & Accessories

Radio Connection Kits

- SRCK0006 Radio Connection Kit SM1 Motorola GP328Plus/GP344/GP388/GL2000
- SRCK0007 Radio Connection Kit SM1 Motorola Suit GP320/328/340/360/HT750/WARIS
- SRCK0008 Radio Connection Kit SM1 Motorola suit GP900/HT1000/MTS2000/XTS3000/MX838/1000
- SRCK0009 Radio Connection Kit SM1 Motorola suit GP88/300/2000/CP100/150/450/P040/PRO3150
- SRCK0010 Radio Connection Kit SM1 ICOM suit IC-3063/4063/IC-F50/51/60/61
- SRCK0011 Radio Connection Kit SM1 Kenwood suit TK-190/280/290/380/385/480/3140/3148/3180
- SMHK0000 Sensear SM1 HYGIENE KIT

Accessories

- SMBM0001 Sensear Boom Microphone Kit
- SCAJ0002 Cable Spiral Audio SM1 3.5-3.5mm THREADED
- SMWS0001 Microphone Wind Noise Reduction Kit (set of 4)

Helmet Mount Adapters

- SMH-A0000 Helmet Adaptor MSA V-Guard
- SMH-A0001 Helmet Adaptor Protector Allsafe
- SMH-A0002 Helmet Adaptor Protector Tuffmaster II/III
- SMH-A0003 Helmet Adaptor Unisafe UniLite

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Design and specifications are subject to change without notice.



“Clear, Safe Communication in High Noise Environments”

Face to Face, Mobile Phone and Two-way radio.

Speaker output
Limited to
82dB(A) in
the ear*

*When tested according to EN 352-4 below H, M and L criterion levels



SENS™ technology
SENS™ technology is a revolutionary technology invented by Sensear. It perfects the combination of speech enhancement and noise suppression technologies with a complex set of unique algorithms enabling what has previously been impossible, the ability to produce high quality speech audibility and optimum hearing protection in environments with noise levels above 85dB(A).



Speech Enhancement
Sensear's revolutionary speech enhancement technology isolates and enhances speech in real-time, enabling users to hear speech clearly and safely in environments that until now has been impossible. Sensear's speech enhancement technology is effective for mobile phone calls and two-way radio communication as it enhances the wearer's speech and lowers background noise for the call receiver.



Noise Suppression
Sensear's SENS™ technology recognises the different properties of speech and background noise thereby allowing noise to be suppressed without distorting the speech. The technology reduces background noise to comfortable levels while retaining the original sound characteristics of noise. This allows users to retain awareness of their surroundings for optimum safety.



Bluetooth®
Sensear's x models incorporate Bluetooth® technology, enabling pairing and subsequent connection with mobile phones so that users can take and make mobile phone calls without removing hearing protection. SENS™ technology + Bluetooth® means lower background noise for the call receiver, enabling natural and comfortable communication with the wearer.



SM1x Helmet mount



SM1 Ultra



SM1x Ultra



SM1 Helmet mount



Aux input with protector cover



Two-way radio interface connector



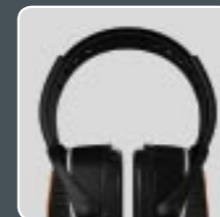
Ruggedised for tough treatment



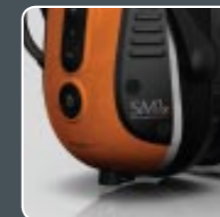
Battery charge LED indicator



Easy to use large buttons



Easily adjusted headstrap



Dual microphone pick-up for clear communication



Super-seal comfort ear muff



Bluetooth® LED indicator



High-Visibility safety colours

Product Details

The need to communicate effectively in high noise environments makes the new SM1 range of earmuffs from Sensear an obvious choice. The SM1 and SM1x earmuffs have all the features expected from premium hearing protectors with the addition of groundbreaking new technology that now delivers speech quality and functionality that sets a new benchmark for communication-enabled hearing protection.

Featuring rugged design for heavy duty and general use, the SM1 and SM1x earmuffs are simple to use, comfortable hearing protectors that allow clear communication beyond 85dB(A) via face to face, two-way or mobile phone (SM1x only) and most importantly, without the need to remove hearing protection.

Combining Bluetooth technology with advanced SENS™ technology, the SM1x earmuff offers the highest level of voice communication available on the market, with optimised hearing and speech clarity when used with mobile phones.

Offering all the features of the SM1x with the exception of Bluetooth® mobile phone connectivity, the SM1 is a premium product at a competitive price for those who do not require Bluetooth® functionality.

Sensear's SM1 and SM1x earmuffs ensure that maximum hearing protection continues for workers when they communicate in high noise, featuring unparalleled effectiveness above 85dB(A) that enables clear communication at and above the point traditional products struggle to perform. Effective across all classes of occupational noise hazard including continuous, tonal and impact noise, Sensear's SM1 and SM1x earmuffs now mean one flexible product can do the job of many, reducing costs, increasing time efficiency and safety.

Incorporating Sensear's groundbreaking SENS™ technology, the SM1 and SM1x earmuffs include impact, tonal and constant noise suppression whilst maintaining full spatial awareness. This ensures that background noise is lowered to a safe level while retaining the natural qualities of the sound. The wearer retains awareness of their surroundings while being able to clearly hear the direction of all sound, including speech and alarms.

By recognising and addressing the global cost to occupational health and industry caused by exposure to harmful noise levels, Sensear's technology has the potential to prevent new cases of Noise Induced Hearing Loss. In a world-first, the SM1 and SM1x earmuff range offer new comfort and safety for people already suffering hearing loss, who can now enjoy assisted listening via Sensear's unique Speech Enhancing Noise Suppression SENS™ technology.

As well as the numerous safety benefits, users of Sensear products also benefit from the newfound ability to have normal interaction with work mates on the job. As described by one user in the industry field tests, "the ability to hear customers speak, talk on the two-way and mobile, and not go home with my ears ringing is unbelievable". Effective across the three classes of noise hazards: continuous, tonal and impact, Sensear's SM1 and SM1x electronic earmuffs now mean you can communicate clearly and effectively without compromising your safety.

Technical Details

	SM1x	SM1
Effective above 85dB(A)	Yes	Yes
Protects against impact noise	Yes	Yes
Protects against tonal noise	Yes	Yes
Protects against continuous noise	Yes	Yes
SENS™ technology built-in	Yes	Yes
Bluetooth® pairing to mobile/cell phone	Yes	No
Two-way interface	Yes	No
Full spatial awareness - hear the direction of speech and other sounds	Yes	No
Stereo sound quality	Yes	No
MP3 interface	Yes	No
Volume memory	Yes	No
Replacement hygiene kit	Yes	No
Helmet mount available	Yes	No
Boom microphone available	Yes	No
High-Visibility safety colours	Yes	No
Industrial ruggedised	Yes	No
12+ hours of continuous talk time	Yes	No
Weight:	440g	440g