

# SM1P02 SERIES

The Versatile Solution for Safe Communication in Noisy Workplaces

The SM1P02 provides essential features and benefits to improve safety, reliability, and efficiency. Sensear's new industrial headset platform offers a robust design adhering to higher noise reduction standards. These headsets use Sensear's SENS® technology to enhance speech and suppress noise while the noise-canceling boom mic filters out background noises so that clear speech is transmitted through the microphone. SM1P's upgraded Bluetooth® module also allows for the streaming of audio to the headset. The new cable connection at ear cup allows you to use it as a wired headset along with Bluetooth and Short Range or unplug the cable and use it as a completely wireless headset via Bluetooth and Short Range.

Intrinsically Safe versions are available for use in Hazardous Environments



360°  
Situational  
Awareness



Electronic  
Volume Limiter



Cellular  
Bluetooth



Face to Face  
Communication



Protects Hearing



Short Range  
Communication



Two-way  
Radios



Speech Enhancement  
Noise Suppression



Intrinsic Safety

## FEATURES AND BENEFITS

- Clear two-way radio communication in high-noise environments
- Bluetooth cellular connection for conversation and audio streaming
- Limit 'in-ear' exposure to 82 dB(A)
- Compatible with leading two-way radios via removable wired connection or Bluetooth
- Improved Short Range with VOX capabilities and additional channel banks
- FM Radio enable/disable: Allows users to listen to commercial FM Radio stations
- Upgraded battery life (up to 24 hours) for use in multiple shifts
- Available in headband, behind-the-neck, and helmet style
- SENS® Technology - remain aware of surrounding noises and hazards
- Enhances speech while suppressing background noise to a safe level
- Noise-canceling boom mic
- Intrinsically safe SM1PIS series certified to: TIA-4950-A, CSA C22.2 No. 157.92, & UL 913 5th Edition with a hazardous location rating of Class I, II, III, Division 1 & 2, Groups A - G, T4 -20°C to +40°C, T3C -20°C to +50°C



**Sensear**   
*Hear Speech Stay Protected*

## Styles



Type	Non-IS Part #	IS Part #
<b>Headband (HB)</b>	SM1PB002	SM1PBIS02

Type	Non-IS Part #	IS Part #s
<b>Behind-the-Neck (BTN)</b>	SM1PE002	SM1PEIS02

Type	Non-IS Part #	IS Part #s
<b>Helmet Mount (HM)</b>	SM1PH002	SM1PHIS02

## Technical Specifications

### General

Headset Type	Headband (HB)	Behind-the-neck (BTN)	Helmet Mount (HM)
<b>Sensear Part Number</b>	SM1PB002 / SM1PBIS02	SM1PE002 / SM1PEIS02	SM1PH002 / SM1PHIS02
<b>Weight</b>	495 g (17.46 oz.)	428 g (15.09 oz.)	480g (16.93 oz.)
<b>IP Rating</b>	IP54		
<b>Operating temperature</b>	-20°C to +60°C (-4°F to 140°F)		

### Hearing Protection

<b>Volume limiter</b>	82 dB(A) [programmable] – only applicable when headset is powered on		
<b>Region</b>	Australia / NZ	USA / Canada	Europe
<b>Standard</b>	AS/NZS 1270	ANSI S3.19	EN352-1/EN352-3
<b>Result</b>	SLC80	NRR	SNR
<b>HB</b>	31 dB, Class 5	27 dB	33 dB
<b>BTN</b>	27 dB, Class 5	24 dB	30 dB
<b>HM</b>	26 dB, Class 5	23 dB	31 dB

### Power

	Non-Intrinsically Safe	Intrinsically Safe
<b>Battery type</b>	Rechargeable - lithium polymer	Rechargeable - lithium ion
<b>Battery capacity</b>	2650 mAh	2250 mAh
<b>Operating time</b>	24 hours	24 hours(wired) / 18 hours(Bluetooth/SR)
<b>Charge time</b>	5 hours	4 hours
<b>Charging temperature</b>	0°C to +40°C (32°F to 104°F)	0°C to +40°C (32°F to 104°F)

### Communication

<b>SENS® 360° Situational Awareness</b>	95 dBA		
<b>Voice Transmission</b>	Boom microphone – noise canceling VOX capable when used in ShortRange mode for Headset to Headset communication VOX capable when connected to VOX enabled two-way radio.* *(Must be verified and tested for compatibility with the two-way radio).		
<b>Wired Connectivity</b>	6-pin Hirose connector	Two-way operation without power* (only applicable to SM1P non IS models with radio cable connection)	Audio revert to radio when headset Hirose connector disconnected*
<b>Short Range</b>	Half-duplex communications	Up to 8 programmable FM channels	Up to 50 meters (164 feet)
<b>Bluetooth</b>	Bluetooth® 3.0: HFP (8KHz and 16KHz), HSP, A2DP		15 meters (49 feet)

\*dependent on radio type and compatible SRCK radio cable

### Short Range

Region	EIRP (uW)	Standards	FM Freq. range (MHz)
1	8.02	AS/NZS 4268	88.1 – 107.9
2	0.048	EN301357-1	88.1 – 107.9
3	0.012	FCC-15.239 & IC RSS210	88.1 – 97.0

\*FM Radio enable/disable option: Allows user to listen to commercial FM radio stations

## Intrinsic Safety

### SM1P02-IS series:

TIA-4950-A, CSA C22.2 No. 157.92, & UL 913 5th Edition with a hazardous location rating of Class I, II, III, Division 1 & 2, Groups A - G, T4 -20°C to +40°C, T3C -20°C to +50°C

## Noise is Everywhere



OIL & GAS/PETROCHEMICAL/ENERGY



CONSTRUCTION/HEAVY EQUIPMENT



MANUFACTURING/MINING (ABOVE GROUND)

Your Local Dealer

**Malux**  
solutions

**Sensear Pty Ltd**  
199 Great Eastern Highway,  
Belmont, WA, 6104  
Australia  
+61 8 9277 7332

**Sensear Inc.**  
150 South Washington St  
Suite C  
Carpentersville, IL 60110  
United States  
Toll Free: 1-888-9SENSEAR  
1-888-973-67327

**Sensear**  
Hear Speech Stay Protected  
**SENS**  
TECHNOLOGY by Sensear

www.sensear.com