

SM1P02 ISDP SERIES

The Versatile Solution for Intrinsically Safe Communication in Extremely Noisy Workplaces

Sensear's SM1P02 ISDP Smart Headset is the total high noise communication solution for Intrinsically Safe Environments. Dual hearing protection (both ear-plugs and headsets) is often required where noise exposure may exceed 95 dB. In many critical working areas, operators in these environments are required to use two-way radios to hear and respond to site communications. Without the use of an appropriate intrinsically safe headset, communications on site can be very difficult.

The SM1P ISDP provides essential features and benefits to improve safety, reliability, and efficiency. Sensear's new industrial headset platform combined with Dual Protection for Extreme Noise and Intrinsic Safety for Hazardous Environments offers a robust design and some of the highest 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 noise 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.



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 extreme high-noise environments
- Bluetooth cellular connection for conversation and audio streaming
- Limit 'in-ear' exposure to 82 dB(A)
- Up to 31dB (NRR) Noise Reduction Rating
- 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 SM1P ISDP 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



SM1P02 ISDP Styles



Type: Headband (HB)	
Wired/BT/SR Part #	SM1PBISDP02



Type: Behind-the-Neck (BTN)	
Wired/BT/SR Part #	SM1PEISDP02



Type: Helmet Mount (HM)	
Wired/BT/SR Part #	SM1PHISDP02

Technical Specifications

General

Mounting Type	Headband (HB)	Behind-the-neck (BTN)	Helmet Mount (HM)
Sensear Part Number	SM1PBISDP02	SM1PEISDP02	SM1PHISDP02
Weight	495 g (17.46 oz.)	428 g (15.09 oz.)	480g (16.93 oz.)
IP Rating	IP54		
Operating temperature	-20°C to +60°C (-4°F to 140°F)		

Hearing Protection

Volume limiter	82 dB(A) [programmable] – only applicable when headset is powered on
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Ear Piece Style	Foam	Silicone	Class	Foam	Silicone	Foam	Silicone
Region	Australia / NZ			USA / Canada		Europe	
Standard	ANSI S3.19			ANSI S12.6		ANSI S12.6	
Result	SLC80			NRR		SNR	
HB	32dB	30dB	Class 5	30dB	29dB	37dB	37dB
BTN	33dB	29dB	Class 5	31dB	27dB	38dB	36dB
HM	30dB	28dB	Class 5	29dB	26dB	38dB	39dB

Power

Battery type	Rechargeable - lithium ion
Battery capacity	2250 mAh
Operating time	24 hours (wired connection) / 18 hours (with Bluetooth/Short Range activated)
Charge time	4 hours
Charging temperature	0°C to +40°C (32°F to 104°F)

Communication

SENS® 360° Situational Awareness	95 dBA		
Voice Transmission	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).		
Wired Connectivity	6-pin Hirose connector		
Short Range	Half-duplex communications	Up to 8 programmable FM channels	Up to 50 meters (164 feet)
Bluetooth	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

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Noise is Everywhere



FOOD PROCESSING / MANUFACTURING



OIL & GAS / PETROCHEMICAL



ENERGY / RAW MATERIALS