SM1P-Ex SERIES

The Versatile Solution for Safe Communication in Hazardous and Noisy Workplaces

Be the productivity and safety leader in your industry with our unique and innovative SENS® Technology providing hearing protection, 360° situational awareness and total communication (face-to-face, two-way radio, Bluetooth® and Short-Range Headset-to-headset). The SM1P-Ex series provides essential features and benefits to improve safety, reliability, and efficiency in high noise and hazardous work environments. 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-Ex'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. The SM1P-Ex series is Intrinsically Safe certified to ATEX and IECEx standards for use in Hazardous Locations.

- 360° Situational Awareness
- Protects Hearing
- Intrinsic Safety
- Electronic Volume Limiter
- Short-Range Communication
- Cellular Bluetooth®
- Two-Way Radios
- Face-to-Face Communication
- Speech Enhancement Noise Suppression

FEATURES AND BENEFITS

- Clear two-way radio communication in high-noise environments
- Compatible with leading two-way radios via removable wired connection or Bluetooth®
- Bluetooth® cellular connection for conversation and audio streaming (HFP, HSP and A2DP profiles)
- Improved Short-Range (SR) with VOX capabilities and additional channel banks for headset-to-headset communications
- FM Radio enable/disable: Ability to listen to commercial FM Radio stations
- Upgraded battery life (up to 24 hours) for use in multiple shifts
- SENS® Technology - remain aware of surrounding noises and hazards
- 360° situational awareness
- Enhances speech while suppressing background noise to a safe level
- Face-to-face communication in high noise
- Limit 'in-ear' exposure to 82 dB(A)
- Noise-canceling boom microphone
- Available in Headband, Behind-the-Neck, and Helmet Mount style
- Up to 27dB NRR / 33dB SNR / 31dB, Class 5 SLC80
- Intrinsically safe SM1P-Ex series ATEX & IECEx approved for Hazardous Locations. Certified to: II 2G Ex ib IIC T4 Gb (-20℃ ≤ Ta ≤ +40℃); II 2D Ex ib IIIC T155℃ Db (-20℃ ≤ Ta ≤ +40℃); I M2 Ex ib I Mb (-20℃ ≤ Ta ≤ +60℃)
- Intrinsically safe SM1P-Ex series UL & CSA approved for Hazardous Locations. Certified to: Class I Division 1 Groups A-D, T4 (-20℃ ≤ Ta ≤ +40℃); Class 1 Zone 1 AEx ib IIC T4 Gb (-20℃ ≤ Ta ≤ +40℃); Class II Zone 21 AEx ib IIIC T155℃ Db (-20℃ ≤ Ta ≤ +40℃)

Experience SENS® Technology!

Watch Video

Sensear
Hear Speech Stay Protected

Styles

Type: Headband (HB)	
Wired/BT/SR Part #	SM1PBEX02

Type: Behind-the-Neck (BTN)	
Wired/BT/SR Part #	SM1PEEX02

Type: Helmet Mount (HM)	
Wired/BT/SR Part #	SM1PHEX02

Technical Specifications

General

Headset Type	Headband (HB)	Behind-the-Neck (BTN)	Helmet Mount (HM)
Sensear Part Number	SM1PBEX02	SM1PEEX02	SM1PHEX02
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			

Region	Australia / NZ	USA / Canada	Europe	
Standard	AS/NZS 1270	ANSI S3.19	EN352-1/EN352-3	
Result	SLC80	NRR	SNR	
HB	31dB, Class 5	27dB	33dB	
BTN	27dB, Class 5	24dB	30dB	
HM	26dB, Class 5	23dB	31dB	

Power

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

Communication

Face-to-Face SENS® Mode	SENS® voice pickup limit of 95 dB(A)		
Voice Transmission	Noise-canceling boom microphone VOX capable when used in Short-Range 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)

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 for Hazardous Locations

SM1P-Ex series:

ATEX & IECEx:
II 2G Ex ib IIC T4 Gb (-20°C ≤ Ta ≤ +40°C)
II 2D Ex ib IIIC T155°C Db (-20°C ≤ Ta ≤ +40°C)
I M2 Ex ib I Mb (-20°C ≤ Ta ≤ +60°C)

UL 913 8th, UL 60079-0, UL 60079-11, CSA 60079-0, CSA 60079-11:

Class I Division 1 Groups A-D, T4 (-20°C ≤ Ta ≤ +40°C);
Class 1 Zone 1 AEx ib IIC T4 Gb (-20°C ≤ Ta ≤ +40°C)
Class II Zone 21 AEx ib IIIC T155°C Db (-20°C≤Ta≤+40°C)

Noise is Everywhere

OIL & GAS

PETROCHEMICAL/ENERGY

MINING