

SM1P-Ex: Hazardous Location ATEX Headset

The SM1P-Ex enables high noise two-way radio, Bluetooth®, headset-to-headset communication, and face-to-face communication in explosive environments that require ATEX and IECEx certification. Users of the SM1P-Ex benefit from clear communication using its wired or wireless capabilities as well as face-to-face communication while still protecting their hearing and remaining aware of the surrounding work environment. It's the perfect solution for your hazardous environments such as explosive chemicals and fuels as well as combustible powders.

See more details at [sensear.com/products/headsets/sm1p-ex](https://www.sensear.com/products/headsets/sm1p-ex)



KEY FEATURES

SENS® Technology	Enhances speech while suppressing background noise to a safe level
360° Situational Awareness	Remain aware of surrounding noises and hazards
Hearing Protection	Up to 27dB NRR / 33dB SNR / 31dB, Class 5 SLC80
Volume Limiter	Limit 'in-ear' exposure to 82 dB(A)
Radio Communication	Two-Way Radio via Bluetooth® or PTT Cable
Bluetooth® Communication	Bluetooth® 3.0, 49 feet
Short-Range Communication	Up to 8 Programmable FM Channels, up to 150 ft
FM Radio	Listen to commercial FM Radio stations
Voice Transmission	Noise Cancelling Boom Mic, VOX-Capable
Power	Upgraded 24-hour battery life for use in multiple shifts
Headsets Styles	Headband, Behind-the-Neck, Helmet Mount
IP Ratings	IP54 (headset), IP68 (boom mic)
Intrinsic Safety	ATEX, IECEx, UL 913 8th, UL 60079-0, UL 60079-11, CSA 60079-0, CSA 60079-11

 360° SITUATIONAL AWARENESS	 ELECTRONIC VOLUME LIMITER	 PROTECTS HEARING	 ENHANCE SPEECH SUPPRESS NOISE
 FACE-TO-FACE COMMUNICATION	 BLUETOOTH® COMMUNICATION	 TWO-WAY RADIO COMMUNICATION	 SHORT-RANGE COMMUNICATION
 INTRINSIC SAFETY		 SAFETY THAT SPEAKS VOLUMES	
			



Sensear in Action

Headset Styles



SM1PBEX02 | HEADBAND
27dB NRR / 33dB SNR / 31dB, Class 5 SLC80



SM1PEEX02 | BEHIND-THE-NECK
24dB NRR / 30dB SNR / 27dB, Class 5 SLC80



SM1PHEX02 | HELMET MOUNT
23dB NRR / 31dB SNR / 26dB, Class 5 SLC80

Technical Specifications

GENERAL	MOUNTING TYPE	PART NUMBER	WEIGHT	IP RATING	OPERATING TEMPERATURE		
	Headband (HB)	SM1PBEX02	495 g (17.46 oz.)	IP54	-20°C to +60°C (-4°F to 140°F)		
	Behind-the-Neck (BTN)	SM1PEEX02	428 g (15.09 oz.)	IP54	-20°C to +60°C (-4°F to 140°F)		
	Helmet Mount (HM)	SM1PHEX02	480g (16.93 oz.)	IP54	-20°C to +60°C (-4°F to 140°F)		
HEARING PROTECTION		REGION	STANDARD	RESULT	HB	BTN	HM
Volume Limiter - 82 dB(A) [programmable] Only applicable when headset is powered on		Australia / NZ	AS/NZS 1270	SLC80	31dB, Class 5	27dB, Class 5	26dB, Class 5
		USA / Canada	ANSI S3.19	NRR	27dB	24dB	23dB
		Europe	EN352-1/EN352-3	SNR	33dB	30dB	31dB
POWER	BATTERY TYPE	BATTERY CAPACITY	OPERATING TIME	CHARGE TIME	CHARGING TEMPERATURE		
	Rechargeable Li-ion Polymer	2250 mAh	24 hours (wired) / 18 hours (Bluetooth®/SR)	4 hours	0°C to +40°C (32°F to 104°F)		
COMMUNICATION	FACE-TO-FACE SENS® MODE	VOICE TRANSMISSION		TWO-WAY RADIO		BLUETOOTH®	
	SENS® voice pickup limit of 95 dB(A)	Noise-cancelling boom microphone. VOX capable when connected to VOX enabled two-way radio. (Must be verified and tested for compatibility with the two-way radio.)		6-pin Hirose connector. Two-way radio audio through headset without headset battery. Audio revert to radio when headset Hirose disconnected. (Dependent on radio type and compatible SRCK radio cable.)		Bluetooth®3.0: HFP (8 KHz and 16 KHz), HSP, A2DP. Up to 15 meters (49 ft).	
SHORT-RANGE COMMUNICATION			REGION	EIRP (UW)	STANDARDS	FM FREQ. RANGE (MHZ)	
Half-duplex communications. Up to 8 programmable FM channels. Up to 50 meters (164 ft). FM Radio enable/disable option: Allows user to listen to commercial FM radio stations.			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	88.1 – 97.0	

ATEX & IECEx certifications:

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 & CSA certifications:

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)

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