

SM1P-ExDP: Dual Protection Headset for Communication in Extreme Noise

Dual protection is often a requirement in many critical working areas where exposures may exceed 110 dB(A), Sensear has integrated our SENS® communication capabilities into an Intrinsically Safe Dual Protection headset so users can effectively communicate without removing their hearing protection in these extremely high-noise hazardous conditions. Based on the existing SM1P-Ex headset and incorporating our unique dual protection feature, the SM1P-ExDP headset fills the marketplace need for a high-performing hazardous location headset for extreme noise environments that require ATEX and IECEx certifications.

See more details at sensear.com/products/headsets/sm1p-exdp



KEY FEATURES	
SENS® Technology	Enhances speech while suppressing background noise to a safe level
360° Situational Awareness	Remain aware of surrounding noises and hazards
Double Hearing Protection	Up to 36dB NRR / 38dB SNR / 33dB, 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	DOUBLE HEARING PROTECTION	ENHANCE SPEECH SUPPRESS NOISE
FACE-TO-FACE COMMUNICATION	BLUETOOTH® COMMUNICATION	TWO-WAY RADIO COMMUNICATION	SHORT-RANGE COMMUNICATION





Sensear in Action

Headset Styles



SM1PBEXDP02 | HEADBAND
36dB NRR / 37dB SNR / 32dB, Class 5 SLC80



SM1PEEXDP02 | BEHIND-THE-NECK
36dB NRR / 38dB SNR / 33dB, Class 5 SLC80



SM1PHEXDP02 | HELMET MOUNT
36dB NRR / 38dB SNR / 30dB, Class 5 SLC80

Technical Specifications

GENERAL	MOUNTING TYPE	PART NUMBER	WEIGHT	IP RATING	OPERATING TEMPERATURE
	Headband (HB)	SM1PBEXDP02	495 g (17.46 oz.)	IP54	-20°C to +60°C (-4°F to 140°F)
	Behind-the-Neck (BTN)	SM1PEEXDP02	428 g (15.09 oz.)	IP54	-20°C to +60°C (-4°F to 140°F)
	Helmet Mount (HM)	SM1PHEXDP02	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	32dB, Class 5	33dB, Class 5	30dB, Class 5
	USA / Canada	ANSI S3.19	NRR	36dB	36dB	36dB
	Europe	EN352-1/EN352-3	SNR	37dB	38dB	38dB

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-canceling 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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