# **Technical Data Specification**

# **3M<sup>™</sup> PELTOR<sup>™</sup> WS<sup>™</sup> LiteCom Pro III Ex Headset**

# Analog/Digital 2-way radio Headset

# **Product Description**

The 3M<sup>™</sup> PELTOR<sup>™</sup> WS<sup>™</sup> LiteCom Pro III Ex Headset is the next generation protective communication solution. With an integrated, programmable analog/digital two-way radio, Bluetooth® Multipoint connectivity, noise-cancelling speech microphone, and level-dependent function for ambient listening, the 3M™ WS™ LiteCom Pro III Ex Headset not only helps protect you against potentially hazardous noise, but also makes it easy to communicate in noisy environments and helps you maintain situational awareness.

ELTOR

## **Key Features**

- Programmable analog/digital DMR two-way radio communication
- Bluetooth® multipoint functionality
- Water tight speech microphone (IP68)
- Level-dependent function for ambient listening
- Voice menu with multiple language selection
- Push-to-Listen function
- Rechargeable battery, Li-Ion •
- Voice operated transmission (VOX)
- Busy channel indication
- Auto power off function
- Battery status indication
- IS (Intrinsically Safe) approval ATEX/IECEx

### **Applications**

The 3M<sup>™</sup> PELTOR<sup>™</sup> WS<sup>™</sup> LiteCom Pro III Ex Headset, ATEX-approved, offers wireless communication in noisy environments. Can be used for work in Oil & Gas Industry, Mining and where intrinsic safety products are required. Approved for use in potentially explosive environments in accordance with the ATEX directive and the IECEx scheme for dust, gas and underground mining.

## **Standards and Approvals**

MT73H7\*4D10EU-50 is in conformity with the provisions set out in the PPE directive 89/686/EEC, RED directive 2014/53/EU and the ATEX directive 2014/34/EU.

The product has been examined by;

Finnish Institute of Occupational Health (Notified Body #0403), Topeliuksenkatu 41 b, FI-00250, Helsinki, Finland. EMCCert DR. RAŠEK GmbH, Notified Body #0678, Störnhofer Berg 15 91364 Unterleinleiter

Germany.

DNV Nemko Presafe AS, Veritasveien 3, 1363 Høvik, Oslo Norway, Notified Body #2460.

## **Intrinsically Safe**

MT73H7\*4D10EU-50 headsets are ATEX and IECEx certified and approved by DNV Nemko Presafe AS for use in potentially explosive atmospheres. EC-Type Examination Certificate Number:

Presafe 16ATEX8960X
I M1 Ex ia I Ma -20°C ≤ Ta: ≤ +50°C
II 1G Ex ia IIC T4 Ga -20°C ≤ Ta ≤ +50°C Ga
II 1D Ex ia IIIC T130°C Da -20°C ≤ Ta ≤ +50°C

IECEx Certificate (IECEx Presafe 16.0086X) Ex ia I Ma -20°C ≤ Ta: ≤ +50°C Ex ia IIC T4 Ga -20°C ≤ Ta ≤ +50°C Ex ia IIIC T130°C Da -20°C ≤ Ta ≤ +50°C

### Models:

Article number	Description	3M ID	SAPID
MT73H7F4D10EU-50	3M™ PELTOR™ WS™ LiteCom Pro III Ex Headset, 403-470 MHz, Analog/Digital, Ex, EU version, Headband	UU008014225	7100098897
MT73H7P3E4D10EU-50	3M™ PELTOR™ WS™ LiteCom Pro III Ex Headset, 403-470 MHz, Analog/Digital, Ex, EU version, Helmet	UU008014233	7100098836
MT73H7B4D10EU-50	3M™ PELTOR™ WS™ LiteCom Pro III Ex Headset, 403-470 MHz, Analog/Digital, Ex, EU version, Neckband	UU008014217	7100098898

## **Accessories and Spare parts**

MT90-02	Throat microphone for WS™ LiteCom Pro III Ex Headset, ATEX	XL001644068	7000040037
ACK082	Rechargeable Li-Ion batterypack (only for WS™ LiteCom Pro III Ex Headset)	UU008176040	7100112102
AL2AH	Charge cable for ACK082	11003072094	7100067410
FR08	Power Supply for AL2AH	XH001680194	7000108521
FL5602-50	External PTT for WS™ LiteCom Pro III Ex Headset, ATEX	XH001654579	7000039666
M60/2	Wind shield for surround mic	XH001652532	7000039650
HY83	Hygiene kit	UU008197921	7100113964
HYM1000	Hygiene tape for boom mic	XH001651328	7100064281
M171/2	Wind protector for mic, 2 pcs	UU008159483	7100112112





Hearing protection with built in two-way radio



Hearing protection with level-dependent function for ambient listening



Digital two way radio according to DMR standard.



tooth® Technology



Intrinsically safe design





# **Technical data specifications**

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Model	Weight (with ACK082)
Headband:	521 g
Helmet attachment:	512 g
Neckband:	475 g

#### **Built-in Two-way Radio**

Frequency range:	403 – 470 MHz
Operation mode:	Simplex
Channels:	70 programmable channels
Channel separation:	12,5 kHz and 25 kHz
Modulation:	Analog: 2,5 kHz (FM) and 5 kHz (FM) Digital: 2,5 kHz (4-level FSK)
Microphone type:	Dynamic (MT73)
Receiver sensibility:	Typical -120 dBm
Selective squelch:	Programmable (supports CTCSS and DCS)
Output power:	200 / 20 / 10 mW ER
Range:	Outdoors up to 2 km depending on conditions
Operating temperature:	-20°C to +50°C

#### Power

Li-Ion battery:	ACK082, included in delivery
Charging time:	12 hours
Capacity:	3,7 V, 1350 mA, 5 Wh
Operating time:	8 hours * (90 stby / 5 tx / 5 rx)
*can be increased up to 12 hours	with the power save feature
Storage	
Recommended storage conditions:	-20° C - +55° C, <90% humidity
Recommended max. shelf life:	Headset: 3 years
	Battery: 1 year

Use limitation: Never modify or alter this product

### In the box

- 1×3M<sup>™</sup> PELTOR<sup>™</sup> WS<sup>™</sup> LiteCom Pro III Ex Headset.
- 1 x Battery (ACK082)
- 1 x Power supply FR08
- 1 x Cable AL2AH (for ACK082)
- 1 x Hygiene kit HY83
- 1 x User instruction
- 1 x Intrinsic Safety Guide

**3M Personal Safety Division** 3M Svenska AB, Box 2341 SE-331 02 Värnamo Sweden

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# Laboratory Attenuation

MT73H7F4D10EU-50 EN352-1:2002									
<i>f</i> (Hz)	125	250	500	1000	2000	4000	8000	SNR	
M <sub>f</sub> (dB)	18.6	24.3	33.6	36.8	35.5	39.4	35.5		
s <sub>f</sub> (dB)	2.9	2.4	2.4	3.4	2.9	2.5	3.4	33	
APV <sub>f</sub> (dB)	15.7	21.9	31.2	33.4	32.6	36.9	32.1	1	

H=34 dB M=31 dB L=23 dB

EN352-1:2002

#### MT73H7B4D10EU-50

<i>f</i> (Hz)	125	250	500	1000	2000	4000	8000	SNR
M <sub>f</sub> (dB)	17.7	23.9	32.5	36.2	35.6	39.5	37.1	
s <sub>f</sub> (dB)	2.8	3.1	3.9	3.1	2.5	2.9	2.3	32
APV <sub>f</sub> (dB)	14.9	20.8	28.6	33.1	33.1	36.6	34.8	

H=35 dB M=30 dB L=22 dB

#### MT73H7P3E4D10EU-50

MT73H7P3E4D10EU-50 EN352-3:								:2002
f (Hz)	125	250	500	1000	2000	4000	8000	SNR
M <sub>f</sub> (dB)	18.1	23.2	32.0	36.4	34.2	40.2	34.5	
s <sub>f</sub> (dB)	3.3	1.8	3.4	2.7	1.9	2.5	4.6	32
APV <sub>f</sub> (dB)	14.8	21.4	28.6	33.7	32.3	37.7	29.9	

H=33 dB M=30 dB L=23 dB

The 3M<sup>™</sup> PELTOR<sup>™</sup> WS<sup>™</sup> LiteCom Pro III Ex Headset operates on radio communication frequencies that may be subject to end-user licensing by local government agencies. The user is responsible for contacting the local government agency and obtaining any necessary licences prior to using the two-way communication radio.

WARNING! 3M strongly recommends individual fit testing of hearing protectors. If the NRR or SNR is used to estimate typical workplace protection, 3M recommends that the noise reduction value be reduced by 50% or in accordance with applicable regulations.

Warranty: The warranty does not cover any damage caused by neglected maintenance or careless handling. For more information on maintenance, please see the user instruction.

For complete warranty condition, contact your dealer or local 3M office

#### Important Notice

Important Notice 3M does not accept liability of any kind, be it direct or consequential (including, but not limited to, loss of profits, business and/or goodwill) arising from reliance upon any information herein provided by 3M. The user is responsible for determining the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

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