

# 3M™ Peltor™ Technical Datasheet



PELTOR™

## Peltor™ LiteCom Pro II

MT7H7\*4010-EU-50, IS version (intrinsically safe)

### Product Description:

3M™ Peltor™ LiteCom Pro II is a hearing protector with built in programmable 2-way communication radio 403-470 MHz, a level dependent function and an external audio input. It is approved for use in potentially explosive areas according to ATEX/IECEX regulations.

### Art no:

MT7H7F4010-EU-50  
MT7H7P3E4010-EU-50  
MT7H7B4010-EU-50

### Description:

LiteCom Pro II 403-470 MHz headband Ex  
LiteCom Pro II 403-470 MHz helmet att. Ex  
LiteCom Pro II 403-470 MHz neckband Ex

### 3M ID no:

XH001679923  
XH001679949  
XH001679931

### Key Features:

- 2-way radio communication
- Level dependent stereo function
- Rechargeable battery, Li-Ion
- Voice operated transmission (VOX)
- Busy channel indication
- Auto power off function
- Low battery warning
- IS (Intrinsically Safe) approval ATEX/IECEX

### Applications:

- Underground coal mines
- Oil & Gas industry
- Industry where intrinsic safety is required

### Standards and Approval:

MT7H7\*4010-EU-50 is in conformity with the provisions set out in the PPE directive 89/686/EEC, R&TTE directive 1999/5/EC and the ATEX directive 94/9/EC.

The product has been examined by;

Combitech, Kungsörsvägen 68, 732 81, Arboga, Sweden, Notified Body#2279.

Bay Area Compliance Laboratories Corp. Shenzhen, Guangdong, Shenzhen, Guangdong, China, Notified Body#0313.

NEMKO AS, P.O. Box 73, Blindern, N-0314 OSLO, Norway, Notified Body# 0470.

### Intrinsically Safe

MT7H7\*4010-EU-50 headsets are ATEX and IECEX certified and approved by Nemko for use in hazardous locations. EC-Type Examination Certificate Number: Nemko 11ATEX1234X

IECEX Certificate (ExTR Ref.No NO/NEM/ExTR11.0031/00)

I M1 Ex ia I Ma

II 1G Ex ia IIC T4 -20°C ≤ Ta ≤ +50°C Ga

II 1D Ex ia IIC T130°C Da



# 3M™ Peltor™ Technical Datasheet

## Technical data specifications

<b>Model</b>	<b>Weight</b>
MT7H7F4010-EU-50	with ACK08: 540 g
MT7H7B4010-EU-50	with ACK08: 500 g
MT7H7P3E4010-EU-50	with ACK08: 540 g

### Materials:

Headband: Stainless steel with leather covered headband

Neckband: Stainless steel with POE cover

Helmet attachment: Stainless steel supporting arms

Cups: ABS

Ear cushions: Foam/fluid-filled ear cushions (PVC/PUR)

**Frequency range:** 403 – 470 MHz

**Operation mode:** Simplex

**Channels:** Max. 30

**Channel raster:** 3.125kHz and 2.5kHz

**Channel separation:** 12.5 kHz, 20 kHz and 25 kHz

**Modulation:** 2.5kHz, 4kHz and 5kHz, FM (16K0F3E / 8K50F3E)

**Microphone type:** Dynamic (MT7) or electret (MT53)

**Receiver sensibility:** Typical -122 dBm

**Selective squelch:** Programmable (and supports CTCSS and DCS)

**Output power:** 200 / 20 / 10 mW ERP

**Range:** Outdoors up to 3 km depending on conditions

**Operating temperature:** -4°F (-20°C) to +122°F (+50°C)

**Operating time:**

(at conditions 10/10/80 TX/RX/Standby at 20°C):

Hi output power: approx. 14 hours

Mid output power: approx. 16 hours

Low output power: approx. 17 hours

### Power:

Li-Ion battery ACK08, included in delivery

Charging time: approx. 10-12 hours

Capacity: 3,7 V, 1350 mA, 5 Wh

Power consumption: Stand-by: ca 55 mA, Receiving: ca 65 mA

Transmission: Low power: ca 100 mA

Medium power: ca 115 mA

High power: ca 200 mA

### Storage:

Recommended storage conditions: -20° C - +55° C, <90% humidity

Recommended max. shelf life: 5 years except the batteries, <1 year

### Use limitation:

Never modify or alter this product

### Attenuation:

MT7H7F4010-EU-50 (headband)

Frequency (Hz)	63	125	250	500	1000	2000	4000	6000
Mean Attenuation (dB)	16,5	17,5	22,5	30,3	34,0	33,6	37,7	33,8
St. dev. (dB)	3,2	2,9	2,7	2,9	2,5	2,8	2,0	3,7
APValue (84%)	13,3	14,6	19,8	27,4	31,5	30,8	35,7	30,2

SNR=31 dB H=32 dB M=28 dB L=21 dB

MT7H7B4010-EU-50 (neckband)

Frequency (Hz)	63	125	250	500	1000	2000	4000	6000
Mean Attenuation (dB)	17,7	17,9	23,3	30,5	34,5	33,5	38,1	34,7
St. dev. (dB)	3,7	3,7	3,1	2,2	2,2	3,1	3,1	2,3
APValue (84%)	14,0	14,3	20,2	28,3	32,3	30,5	35,0	32,5

SNR=31 dB H=32 dB M=29 dB L=21 dB

MT7H7P3E4010-EUA-50 (helmet attachment)

Frequency (Hz)	63	125	250	500	1000	2000	4000	6000
Mean Attenuation (dB)	15,2	16,9	22,0	30,0	34,5	33,1	36,7	34,7
St. dev. (dB)	4,0	3,7	2,9	3,3	2,6	2,4	2,0	3,3
APValue (84%)	11,1	13,2	19,2	26,7	31,9	30,7	34,6	31,3

SNR=30 dB H=32 dB M=28 dB L=20 dB

### 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.

### 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.



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