

#### **Product Description**

The Peltor Optime I range passive earmuffs are available in headband, neckband, foldable or helmet mounted version. These products are designed to provide moderate level of attenuation that meets the needs of the majority of industrial applications.

When correctly selected and worn these products help reduce exposure to hazardous levels of noise and loud sounds.

The helmet mounted version is designed to fit a wide range of industrial safety helmets (see below for further details).

NOTE: A high visibility version is also available

### **Key Features**

- Modern, stylish slim line cup design
- Liquid sealing rings for improved comfort
- Unique low profile headband design helps maintain constant pressure thus providing confidence in protection
- Large space inside cup helps reduce moisture and heat build-up
- Soft wide cushions helps reduce pressure around the ears and improves comfort and wearability
- Easy to replace cushions and inserts helps keep them hygienically clean
- Easy to understand attenuation symbol to help ensure correct product selection
- Helmet mounted version fits directly to many industrial safety helmets without the need for an adapter

#### Helmet mounted approved combination:

| Helmet              | Model               |               | n size range according to |
|---------------------|---------------------|---------------|---------------------------|
| Manufacturer        |                     | P3<br>Adaptor | H510<br>(Optime I)        |
| 3M                  | 1465                | Е             | NL                        |
| Auboueix            | Brennus             | F             | SNL                       |
| Auboueix            | Fondelec            | F             | SNL                       |
| Auboueix            | Iris                | E             | NL                        |
| Auboueix            | Iris 2              | E             | NL                        |
| Sofop<br>Taliaplast | Oceanic             | Е             | NL                        |
| Sofop<br>Taliaplast | Opus                | Е             | NL                        |
| Berendsen<br>Safety | Balance HD          | Е             | SNL                       |
| Centurion           | 1125/ARCO<br>Plus   | Н             | SNL                       |
| Centurion           | 1100/ARCO<br>Type 2 | Н             | SNL                       |
| Centurion           | 1540/ARCO           | Α             | NL                        |
| Evert Larsson       | Robust              | E             | SNL                       |
| Evert Larsson       | Balance             | Е             | NL                        |
| Evert Larsson       | Balance AC          | E             | NL                        |
| Kemira              | Тор Сар             | Α             | SNL                       |
| LAS                 | LP2002              | E             | SNL                       |
| LAS                 | LP2006              | E             | SNL                       |
| MSA                 | Super V-Gard        | Е             | SNL                       |
| MSA                 | V-Gard              | E             | SNL                       |
| Peltor              | G2000               | K,E           | SNL                       |
| Peltor              | G22 (Basic Set)     | E             | SNL                       |

<sup>\*</sup>Protector Style 300 includes all 300-versions of this helmet.

| Helmet<br>Manufacturer | Model                       | Combination<br>EN352-3 | Combination size range according to EN352-3 |  |  |  |
|------------------------|-----------------------------|------------------------|---|--|--|--|
|                        |                             | P3<br>Adaptor          | H510<br>(Optime I)                          |  |  |  |
| Petzl                  | Vertex                      | Е                      | SNL   |  |  |  |
| Peltor                 | G3000                       | Е                      | SNL   |  |  |  |
| Protector              | Style 300*                  | Е                      | SNL   |  |  |  |
| Protector              | Style 600                   | G                      | SNL   |  |  |  |
| Protector              | Tuffmaster II               | E,G                    | NL  |  |  |  |
| Romer                  | Bravo 2 Nomaz               | В                      | SNL   |  |  |  |
| Romer                  | Marcus Top 2<br>Atlas Nomaz | В                      | SNL   |  |  |  |
| Romer                  | N2 Atlas<br>Nomaz           | BB                     | SNL   |  |  |  |
| Romer                  | Profi Expo                  | Е                      | SNL   |  |  |  |
| Romer                  | Profi Nomaz                 | Е                      | SNL   |  |  |  |
| Romer                  | Top Expo<br>Atlas           | В                      | SNL   |  |  |  |
| Schuberth              | BEN                         | BB                     | SNL   |  |  |  |
| Schuberth              | BER80/WPC80                 | EA                     | SNL   |  |  |  |
| Schuberth              | BER S                       | Е                      | SNL   |  |  |  |
| Schuberth              | BER R                       | В                      | SNL   |  |  |  |
| Schuberth              | PIONIER                     | В                      | SNL   |  |  |  |
| Schuberth              | SH91/WP91                   | EB                     | SNL   |  |  |  |
| Schuberth              | SW1                         | EB                     | NL  |  |  |  |
| Uvex                   | Airwing                     | Е                      | SNL   |  |  |  |
| Voss                   | Inap 88                     | Е                      | SNL   |  |  |  |
| Voss                   | Inap Master                 | Е                      | NL  |  |  |  |
| Voss                   | Inap Star                   | Е                      | NL  |  |  |  |
| Voss                   | Inap PCG                    | G                      | NL  |  |  |  |





### **Applications**

The Peltor Optime I range earmuffs are ideal for protection against noise arising from a wide range of applications in the workplace and leisure activity. Examples of typical applications include:-

- Agriculture
- Automotive
- Chemical & pharmaceutical manufacture
- Construction
- Light engineering
- Metal processing
- Woodworking

#### Standard & Approval

The Peltor Optime I range earmuffs are tested and CE approved against the European Standard EN352-1:1993 (headband, neckband and foldable version) and EN352-3: 2002 (helmet mounted version). These products meet the Basic Safety Requirements as laid out in Annex II of the European Community Directive 89/686/EEC. These products have been examined at the design stage by the Finnish Institute of Occupational Health (FIOH), Topeliuksenkatu 41aA, FIN- 00250 Helsinki, Finland (Notified Body number 0403) and INSPEC International Limited, 56 Leslie Hough Way, Salford, Greater Manchester M6 6AJ, UK (Notified Body number 0194).

#### **Materials**

The following materials are used in the manufacture of this product.

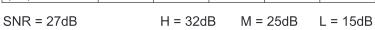
|   | Component                  | Material                                    |  |  |
|---|----------------------------|---|--|--|
|   | Headband/Neckband/Foldable | Stainless Steel Wire, PVC, Acetal           |  |  |
|   | Headband padding           | PVC   |  |  |
| Headband, Neckband and Foldable version | Cups                       | ABS   |  |  |
| Version                                 | Inserts                    | Polyether                                   |  |  |
|   | Cushions                   | Polyether                                   |  |  |
|   | Cushion cover              | PVC   |  |  |
|   | Helmet attachment arm      | Stainless Steel Wire, PVC, Acetal, Polyamid |  |  |
|   | Cups                       | ABS   |  |  |
| Helmet mounted version                  | Inserts                    | Polyether                                   |  |  |
|   | Cushions                   | Polyether                                   |  |  |
|   | Cushion cover              | PVC   |  |  |



#### **Attenuation values**

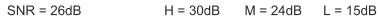
### **Optime I Head Band Version (H510A)**

| Frequency (Hz) | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
|----------------|------|------|------|------|------|------|------|------|
| Mf (dB)        | 14.1 | 11.6 | 18.7 | 27.5 | 32.9 | 33.6 | 36.1 | 35.8 |
| sf (dB)        | 4.0  | 4.3  | 3.6  | 2.5  | 2.7  | 3.4  | 3.0  | 3.8  |
| APVf<br>(dB)   | 10.1 | 7.3  | 15.1 | 25.0 | 30.1 | 30.2 | 33.2 | 32.0 |



#### Optime I Neck Band Version (H510B)

| Frequency (Hz) | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
|----------------|------|------|------|------|------|------|------|------|
| Mf (dB)        | 13.3 | 10.9 | 17.1 | 25.4 | 31.5 | 32.6 | 36.3 | 34.8 |
| sf (dB)        | 4.1  | 3.5  | 2.8  | 1.8  | 2.6  | 4.3  | 3.4  | 3.6  |
| APVf<br>(dB)   | 9.1  | 7.3  | 14.3 | 23.6 | 28.9 | 28.3 | 32.9 | 31.1 |



## Optime I Foldable Version (H510F)

| Frequency (Hz) | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
|----------------|------|------|------|------|------|------|------|------|
| Mf (dB)        | 14.6 | 12.2 | 18.7 | 27.1 | 32.9 | 35.0 | 36.5 | 34.4 |
| sf (dB)        | 3.8  | 3.4  | 3.2  | 3.0  | 2.1  | 4.0  | 2.9  | 3.9  |
| APVf<br>(dB)   | 10.8 | 8.7  | 15.5 | 24.1 | 30.8 | 31.0 | 33.6 | 30.6 |

SNR = 28dB H = 32dB M = 25dB L = 16dB

### Optime I Helmet Mounted Version (H510P3)

| Frequency (Hz) | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
|----------------|------|------|------|------|------|------|------|------|
| Mf (dB)        | 13.1 | 11.2 | 13.4 | 26.9 | 33.9 | 32.0 | 33.5 | 36.9 |
| sf (dB)        | 2.3  | 2.0  | 1.9  | 1.8  | 1.9  | 2.4  | 1.8  | 1.8  |
| APVf<br>(dB)   | 10.8 | 9.2  | 11.5 | 25.1 | 31.9 | 29.6 | 31.7 | 35.1 |

SNR = 26dB H = 32dB M = 23dB L = 15dB











#### **Accessories/Replacement Parts**

The cushions and inserts on the Optime I range can be replaced with the HY51 Hygiene Kit for improved comfort and reassured protection.

The HY100A and HY100A-01 Hygiene Pads can be placed on the cushions to help absorb moisture and sweat.

#### Key

APVf = Assumed Protection Value

Mf = Mean attenuation value

sf = Standard deviation

H = High-frequency attenuation value (predicted noise level reduction for noise with L(C) - L(A) = -2dB)

M = Medium-frequency attenuation value (predicted noise level reduction for noise with L(C) - L(A) = +2dB)

L = Low-frequency attenuation value (predicted noise level reduction for noise with L(C) - L(A) = +10dB)

SNR = Single Number Rating (the value that is subtracted from the measured C-weighted sound pressure level, L(C) in order to estimate the effective A-weighted sound pressure level inside the ear).

3M

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