

### Product datasheet active earmuff

# uvex aXess one

# uvex aXess RAL

safe. active. connected



### PPE-Category III - harmful noise

**uvex aXess one:** Active earmuff with Bluetooth® and RAL-Function

**uvex aXess RAL:** Active earmuff with RAL-Function

#### Product characteristics:

- RAL (Real-Active-Listening), enables the perception of ambient noise and communication at close range
- Bluetooth® 5.2, good sound quality, fast data transfer, large range and optimized power consumption
- Integrated sound level limiter
- Dual connection mode, can be paired with two Bluetooth devices at the same time
- Hands-free telephony, telephone calls without interrupting your work
- Direct operation of the connected phone on the earmuff, the device remains in a protected environment
- Audio assistant, to hear the operating status in the earmuff, no need to remove the earmuff in hazardous areas.

- External audio input, for devices without Bluetooth®
- Charging socket USB Type-C, fast charging, and easy handling thanks to symmetrical plug
- LED operation status light
- LED charging light
- Two surround microphones, for reliable transmission of ambient noise
- Extra voice microphone, to ensure optimal voice quality
- Two 40mm speakers for good sound quality
- Integrated socket covers
- IP54 Water and dust protected ideal also for outdoor locations
- Shaped function keys, they are easy to feel and can also be operated when wearing gloves
- Soft sealing ear pads for a good seal and fit to the head
- Padded comfort headband with soft foam for a comfortable feel
- Microphone foam covers, to reduce the wind noise and protect the microphones
- Foldable headband small and handy stowable, also ideal the earmuff bag with belt loops art.no. 2000002. (Accessories)

only cap mounted earmuffs:

- Coiled cable for more flexible applications (helmet and faceguards)
- Coiled cable therefore suitable for different helmet sizes
- Cable fixation inside the helmet shell with the cable clip 9790022, therefore no annoying cable loops outside
- Two different helmets mounting systems uvex bayonet and 30mm helmet slot
- More flexibility with the uvex bayonet system, equipment according to the protection requirement
- Quick and tool-less disassembly and assembly of the earmuffs with uvex bayonet system
- Very soft sealing ear pads filled with gel for a good seal and fit to the head
- Gel-filled ear pads for good sealing, especially in combination with glasses or goggles
- Sound-decoupled ear cups thanks to rubber suspension

### **Approval:**

The product complies with the harmonized standards EN 352-1:2020, EN 352-3, EN 352-4, EN 352-6, EN 352-8, ANSI S-3.19-1974, CSA Z94.2-02 and AS/NZS 1270:2002 and meets The requirements of the PPE Regulation (EU) 2016/425 and the 2014/53/EU, RED 2014/53/EU and FCC Directives.

The applicable jurisdiction can be found in the Declaration of Conformity here: [uvex-safety.com/ce](http://uvex-safety.com/ce)

The PPE is subject to the following conformity assessment procedures: Conformity to type based on quality assurance related to the production process (Module D) and controlled by:

BSI Group The Netherlands B.V.  
 Say Building, John M. Keynesplein 9  
 1066 EP, Amsterdam  
 Netherlands  
 Notified body No. 2797

## **Bluetooth License:**

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## **Materials:**

Cups:	ABS
Cup arms:	ABS / PC
Headband:	Stainless steel / PU / PE-foam
Sealing cushion:	PU / PE-foam
Cup foam:	PE

## **Technical data:**

Weight:	headband version 364g / helmet attached version 446g
Size:	S / M / L
Operating voltage:	5 V USB type C
Input:	5V ==1A
Battery:	3.7 V lithium-polymer battery, 750 mA
Battery charging time:	2.5 hours
Battery operation time:	50 hours
Audio input:	3.5mm jack plug
Operation temperature:	-10 to + 55°C

Bluetooth® 5.2 Supported profiles: A2DP, AVRCP, HSP, HFP

## Cap mounted earmuff version:

### Content of the delivery:

uvex aXess one helmet basic unit



### Accessories needed for mounting on helmet

Art.No.: 2600230 Earmuff helmet bracket 30mm slot	Art.No.: 2600231 Earmuff helmet bracket uvex bayonet
	

Picture of mounted cup arms for 30mm helmet slot version



Picture of mounted cup arms for uvex bayonet version



**uvex aXess one and uvex aXess RAL is compatible with the following uvex safety helmets:**  
uvex pronamic alpine; uvex pheos, uvex pheos alpine; uvex perffexion; uvex super boss; uvex airwing

Using the product with other safety helmets may affect its protective properties.

## Attenuation values:

### Headband version

Tested according to European Standard EN 352-1:2020

SNR: 31dB

HML: 37dB – 29dB – 21dB



Freq. Hz	63	125	250	500	1000	2000	4000	8000	H	M	L	SNR
Mean att. dB	18.8	16.3	21.0	27.3	37.1	37.8	44.2	43.2	39.1	30.3	22.8	32.8
Std. dev. dB	2.9	2.5	1.7	2.5	2.3	2.9	4.2	4.4	2.3	1.7	1.9	1.7
APV	15.9	13.7	19.2	24.9	34.8	35.0	40.0	38.8	37	29	21	31

EN 352-4: Level dependence H= 115 dB, M= 104dB, L= 87 dB

EN 352-6: 82dBA criterion levels = -4.6dBV or 587.2mV

Tested according to Australian Standard AS/NZS 1270:2002

SLC80: 27dB

Class 5

Clamping force: 11.1N, 10.2N, 10.7N

Freq. Hz	125	250	500	1000	2000	4000	8000
Mean att. dB	14.8	16.3	23.5	33.1	34.3	41.4	40.1
Std. dev. dB	3.5	3.3	3.7	3.5	3.4	5.6	4.2
APV	11.3	13.0	19.8	29.6	30.9	35.8	35.9



AS/NZS 1270  
Lic. 41199  
SAI Global

Hearing protector class 5 tested to AS/NZS 1270. When selected, used and maintained as specified in AS/NZS 1269, this protector may be used in noise up to 110dB(A) assuming an 85 dB(A) criterion. A lower criterion may require a higher protector class.

Tested according to American Standard ANSI S-3.19-1974

NRR: 23dB

CSA Class A

Headband Force: lbs. 2.5

Freq. Hz	125	250	500	1000	2000	4000	8000
Mean att. dB	14.8	16.3	23.5	33.1	34.3	41.4	40.1
Std. dev. dB	3.5	3.3	3.7	3.5	3.4	5.6	4.2
APV	11.3	13.0	19.8	29.6	30.9	35.8	35.9

Test Institute, Michael & Associates, Inc., 2766 W. College Ave Suite 1, State College, PA 16801

## Cap-mounted earmuffs version



Tested according to European Standard EN 352-3:2020

SNR: 27dB

HML: 29dB – 24dB – 18dB



Freq. Hz	63	125	250	500	1000	2000	4000	8000	H	M	L	SNR
Mean att. dB	17	15.7	18.6	23.4	26.8	28.9	40.4	39.2	30.8	25.4	20.6	28.1
Std. dev. dB	3.8	3.5	2.7	2.3	2.1	2.4	3.3	3.6	1.7	1.4	2.2	1.4
APV	13.2	12.2	15.8	21.1	24.7	26.5	37.1	35.7	29	24	18	27

EN 352-4: Level dependence H= 112 dB, M= 101dB, L= 87 dB

EN 352-6: 82dBA criterion levels = -5.2dBV or 547mV

Tested according to Australian Standard AS/NZS 1270:2002

SLC80: 19dB

Class 3

Clamping force: 12.0N, 10.7N, 11.1N

Freq. Hz	125	250	500	1000	2000	4000	8000
Mean att. dB	12.4	12.0	15.1	21.8	27.6	33.3	30.5
Std. dev. dB	4.5	4.3	3.8	3.5	3.6	7.0	5.3
APV	7.9	7.7	11.3	18.3	24.0	26.3	25.2



AS/NZS 1270  
Lic. 41199  
SAI Global

Hearing protector class 5 tested to AS/NZS 1270. When selected, used and maintained as specified in AS/NZS 1269, this protector may be used in noise up to 110dB(A) assuming an 85 dB(A) criterion. A lower criterion may require a higher protector class.

Tested according to American Standard ANSI S-3.19-1974

NRR: 21dB

CSA Class B

Headband Force: lbs. 2.4

Freq. Hz	125	250	500	1000	2000	3150	4000	6300	8000
Mean att. dB	20.0	24.1	21.6	29.6	34.2	36.5	37.8	38.9	38.5
Std. dev. dB	3.7	3.8	2.1	3.3	2.9	4.0	4.0	4.4	4.2

Test Institute, Michael & Associates, Inc., 2766 W. College Ave Suite 1, State College, PA 16801

Freq. - frequency

Mean att. – mean attenuation

Std. dev. – standard deviation

APV – assumed protection value

SNR – single number rating

H – attenuation value at high frequency

M - attenuation value at medium frequency

L - attenuation value at low frequency

## Scope of delivery:

### Headband version

- Active earmuffs uvex aXess one, with built-in rechargeable battery
- Quick-start guide
- Instruction for use
- USB- charging cable
- Audio cable with 3,5mm jack plug
- Microphone covers (3 pcs)

### Cap-mounted earmuffs version

- Active earmuffs uvex aXess one basic\* unit , with built-in rechargeable battery
- Quick-start guide
- Instruction for use
- USB- charging cable
- Cable fixation
- Audio cable with 3,5mm jack plug
- Microphone covers (3 pcs)
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\* Accessories needed for mounting on helmet, (2600230) Earmuff helmet bracket 30mm slot or (2600231) Earmuff helmet bracket uvex bayonet

## Variants/Color:

Article-No..	Article	Color	Packaging unit
2640001	uvex aXess one headband version	black matt / grey	1 piece
2640201	uvex aXess one helmet version basic unit	black matt / grey	1 piece
2640002	uvex aXess RAL headband version	hi-viz orange	1 piece
2640202	uvex aXess RAL helmet version basic unit	hi-viz orange	1 piece

## Accessories:

Article-No.	Name	Packaging unit
2592641	Hygiene kit standard	1 kit
2592643	Hygiene kit with gel-earpads	1 kit
2599978	Comfort pads	10 pads in a pouch
2592640	Microphone cover	9 pcs in a pouch
2600230	Earmuff helmet bracket 30mm slot	1 pair
2600231	Earmuff helmet bracket uvex bayonet	1 pair
9790022	Chinstrap- / Goggle / Cable clip	1 pcs

**Storage:**

Storage location: Store in the original packaging, in a dry, clean environment that is protected against light, UV and heat, at a temperature of between -10°C and 55°C and humidity of max. 85%.

Storage life: 5 years from date of manufacture. See product or packaging for date of manufacture. Ensure that when stored the headband is not extended and the sealing pads are not compressed. The battery must be charged occasionally if the earmuffs are stored for a longer period of time.

**Useful life:**

Useful life of 5 years from date of manufacture. Dispose of the product once it has expired or immediately if it is damaged or can no longer be cleaned.

**Disposal:**

This product is regulated by the Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU. Do not dispose of with normal household waste. The batteries must be disposed of in accordance with national regulations. Dispose of correctly at an official recycling centre.



**CAUTION!** Risk of explosion! Do not dispose of the product in fire.