

# SWISS AIR

Safety doesn't have  
to mean discomfort.



reddot winner 2021



PROTECTING  
PROFESSIONALS

# The revolutionary PAPR



reddot winner 2021

## Welcome to the Swiss Alps. Welcome to optrel swiss air.

Breathing is living. The optrel swiss air PAPR brings clean breathing air into your environment and lets you breathe as freely as you could otherwise only enjoy out in the open air.

Many workplaces and public spaces produce pollutant emissions such as smoke, soot particles, fine dusts or viruses that enter the lungs through the nose, throat and trachea and can consequently cause asthma, a chronic cough, bronchitis or other respiratory diseases including lung cancer. With the optrel swiss air PAPR, you can enjoy fresh air regardless of your activity and other protective equipment. It enables you to be independent and to move around freely.

The core element of the optrel swiss air PAPR is a ventilated half mask that completely covers the mouth and nose area and supplies purified air. A breathing space is created in the mouth and nose area, which supports the user's breathing

by means of positive pressure and eliminates tiring respiratory resistance.

Made from high-tech fabric, the half mask is designed to provide an excellent custom fit thanks to the fully adjustable headband. This concept eliminates the need for time-consuming fit tests, which are common practice with conventional sealed half masks.

The clean air is delivered via a Y-hose from a miniaturised blower system, which sits comfortably on a carrying unit worn on the back. This means that the user is always in a "positive air pressure system", which permanently protects their airways against contaminated air.



## Benefits

### Safety

- >> Guaranteed TH3/TM3 protection.
- >> Easy and safe to use as no fit test is required (for TM, comply with local regulations).

### Health

- >> Continuous protection of the airways and lungs against pollutants in the air.
- >> Airways are protected against irreparable damage.

### Ergonomics

- >> Maximum freedom of movement.
- >> Avoids neck pain and back pain as the device weighs just 550 g.
- >> Freedom to choose suitable head, eye and hearing protection.

### Performance

- >> Increased performance thanks to clean air.
- >> Higher productivity by eliminating forced breaks.
- >> Positive air pressure system for active respiratory support.
- >> Optimal voice clarity when wearing a half mask.

### Cost savings

- >> Suitable for use in all production areas.
- >> Reduced operating costs compared with having to purchase, distribute and dispose of single-use masks.
- >> Reusable half-mask system.

# The PAPR

**Headband** adjustable to any increment - for all sizes from XS to XL.

Y-hose with **adjustable neck strap** and **flexible hose elements** guides the air directly into the half mask.

**Ventilated half mask** made of flame-retardant material completely covers the mouth and nose area. Positive pressure makes it easier to breathe, preventing users from feeling fatigued.

**Shoulder carrying unit** for ergonomically perfect weight distribution of the super-lightweight filter system (weighs just 550 g).

**Blower unit** with automatic air flow calibration and a high-performance battery with 6 to 12 hours of operating time for an uninterrupted working day.\*

**Powerful filter unit** with innovative, ultra-flat design. Lightweight and comfortable to wear; highly efficient in application.

With the optrel swiss air PAPR, you always have enough fresh air available. The respiratory support technology and the ultra-flat and lightweight rucksack design reduce the fatiguing effect, so you can complete your demanding jobs more easily.



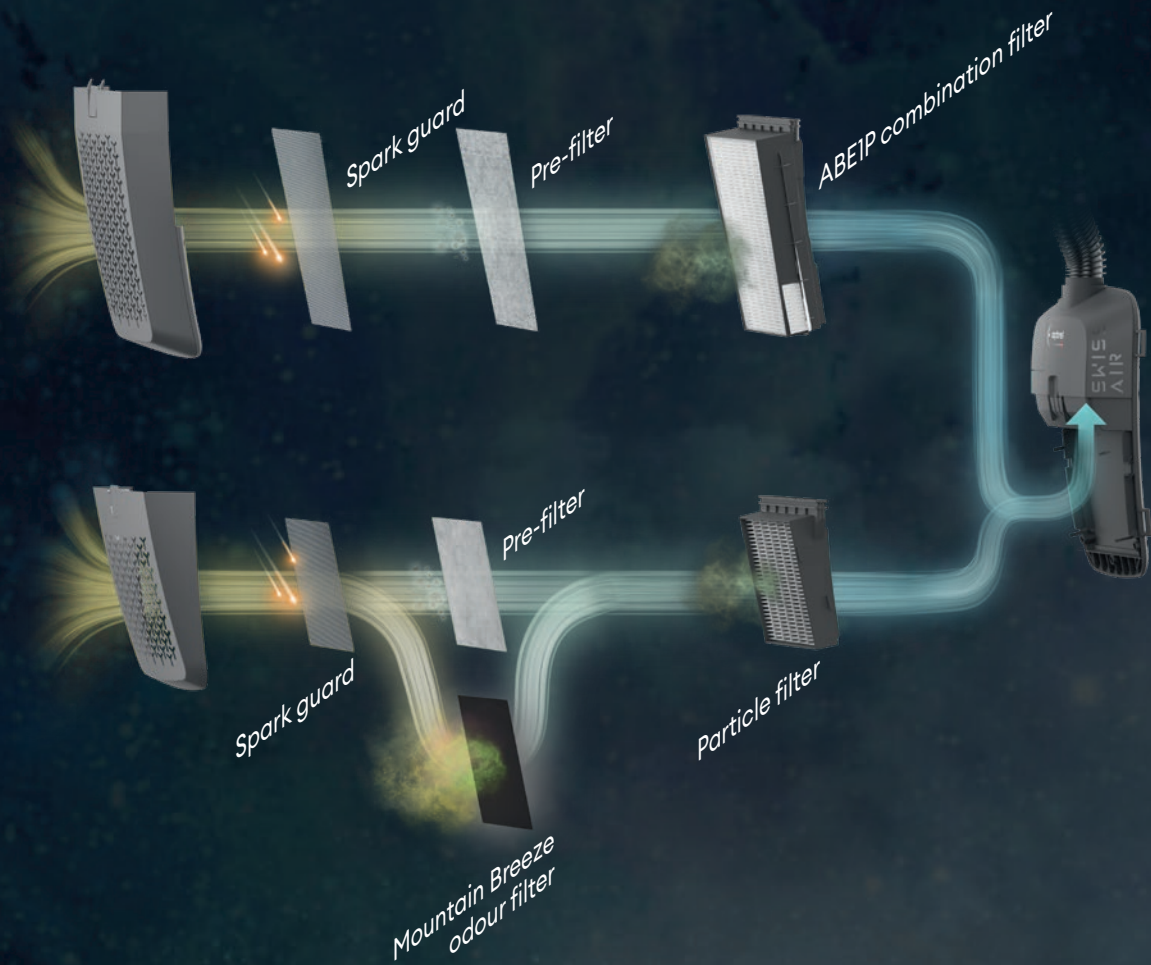
No mask fit test required



Positive pressure principle for respiratory support

\* Operating time depending on air flow, at room temperature with a new filter

Traps aerosols, smoke, particles, gases, vapours or viruses.



## Half mask or silicone mask?

**Half mask:** Protection factor 500.

**Tightfit silicone mask:** Protection factor 2000.

Tightfit silicone mask available in sizes S, M and L.



## Particle filter or combination filter?

**Particle filter:** Traps aerosols, smoke, particles and viruses.

**Combination filter (gas and particle filter):** Traps gases, vapours, aerosols, smoke, particles and viruses.



# It's completely in your hands.

You always have full control of all functions from the central **control panel** securely positioned on the chest piece of the shoulder harness:

- Switching on and off
- Easy-to-read filter and battery status
- Air flow can be adjusted by any increment for maximum working comfort
- Automatic altitude and temperature compensation



Display of the **charge status of the power battery** with 6 to 12 hours of continuous operating time. \*



**Rotary controller** for simple adjustment to any increment to ensure your optimum air flow. Adjustable from 100 to 130 l/min.



It is easy to read the current **filter status** for maximum safety.



**Fully automatic compensation** for a constant air flow regardless of temperature or altitude.

\* Operating time depending on air flow, at room temperature with a new filter



optrel<sup>®</sup>  
LIFE VISION



# Your personal declaration of independence.

optrel swiss air is ideal for use in welding and cutting work in dirty and toxic environments.

The optrel swiss air half mask gives you all the freedom you need – whatever you have in mind. It's a flexible choice that can be combined with any helmet system.

It can be combined with any helmet or other equipment and is therefore the most versatile PAPR available.



Welding/plasma cutting





Flexible.  
Versatile.  
Always there  
for you.  
For all  
your tasks.

The optrel swiss air PAPR is also your perfect partner for construction and demolition work, as well as other outdoor applications where unpleasant odours or dust are generated.

It can be used with almost any construction helmet or even without a helmet at all.

Demolition work/construction work/  
waste disposal/recycling





SWISS  
AIR

Optrel  
SAFETY

Interior finishing/sanding/metalworking/  
woodworking/industrial applications

# Perfect air for breathing.

swiss air permanently protects the airways and lungs against pollutants in the air regardless of the current activity in your working day. This prevents the development of respiratory and lung diseases.

swiss air reduces neck pain and back pain by reducing the weight of head, face and eye protection systems. Heavy combination helmets are no longer necessary.

Your ideal work partner.



A person wearing an orange safety vest is working on a large, grey metal structure, possibly a piece of machinery or a vehicle. The background is blurred, showing more of the structure and some white material. The overall scene is industrial and focused on safety and work.

# Lightweight and flexible.

Respiratory diseases such as asthma, farmer's lung and other ailments caused by dust and particles can be easily prevented with the optrel swiss air PAPR.

The integrated high-performance battery enables up to 12 hours of uninterrupted use. This means that swiss air can be used anywhere and at any time. It is also barely noticeable because it weighs just 550 g. The only thing you can feel is the fresh and clear air.





Clean air  
for your  
surroundings.





## Technical data

**Level of protection** TH3 (EN12941), TM3 (EN12942)

### Blower unit

<b>Flow rates</b>	Level 1: Min. 100 l/min. Level 2: Min. 115 l/min. Level 3: Min. 130 l/min. All levels with automatic air flow control (levels are set directly on the blower and can be adjusted to any increment via the control panel at the front).
<b>Material</b>	PA66 GF30
<b>Fan</b>	High-quality motor with ball bearings
<b>Fuse</b>	Electronic
<b>Noise</b>	Max. 70 dBA
<b>Alarm</b>	Visual (with swiss air control panel) and audible for low/very low battery charge, clogged filter, no filter and low air flow Low battery charge level: Alarm frequency 3.0 s (1.5 s on, 1.5 s off) Filter: Alarm frequency 0.5 s (0.25 s on, 0.25 s off)
<b>Dimensions</b>	(L x W x H): 250 x 170 x 50 mm
<b>Weight</b>	Blower unit 550 g/entire system 1200 g

### Control panel

<b>Reading and setting options</b>	<ul style="list-style-type: none"><li>- Overview of filter contamination and battery charge status</li><li>- Air flow control adjustable to any increment and on/off switch</li><li>- Altitude and temperature compensation</li></ul>
<b>Connection</b>	Operating cable with jack plug and cable protection

### Material

<b>Half mask</b>	POM, tear-resistant textile (98% polyester/2% polyurethane), flame-retardant insert: Polyurethane foam
<b>Tightfit half mask</b>	Silicone, polyacetal clip, polycarbonate window
<b>Valve</b>	Exhalation valve with silicone membrane

### Standards

<b>Standards</b>	EN 12941; Europe: TH3; EN 12942; Europe: TM3; Australia: PAPR-P3; AS/NZS 1716; EAC TP TC 019/2011
<b>Notified body</b>	CE 1024
<b>ATEX</b>	II 3D Ex ic IIIB T4 Dc II 3G Ex ic IIB T4 Gc

# Respiratory protection system

Safety doesn't have to mean discomfort.



## swiss air package

### 1.) swiss air with particle filter with half mask



#### swiss air basic system consisting of:

PAPR, control panel, half mask, particle filter, pre-filter, filter cover, spark guard, hose system, headband and neck strap, shoulder carrying unit, charger, optrel rucksack.

Item no. 4700.010

### 2.) swiss air with particle filter (without half mask\*)



#### swiss air basic system with particle filter consisting of:

PAPR, control panel, WITHOUT half mask, particle filter, pre-filter, filter cover, spark guard, hose system, headband and neck strap, shoulder carrying unit, charger, optrel rucksack.

Item no. 4700.013

### 3.) swiss air with combination filter (without half mask\*)



#### swiss air basic system with ABE1P combination filter consisting of:

PAPR, control panel, WITHOUT half mask, ABE1P combination filter, pre-filter, combination filter cover, spark guard, hose system, headband and neck strap, shoulder carrying unit, charger, optrel rucksack.

Item no. 4700.014

\*Can be ordered with a half mask or tightfit half mask.

## "Ready-to-weld" package/ "Ready-to-grind" package

Just get started!  
Select a package and the right helmet.

### The package includes:

PAPR, control panel, half mask, particle filter, pre-filter, filter cover, spark guard, hose system, headband and neck strap, shoulder carrying unit, charger, optrel bag.



### Package – helix series

### Item no.



helix **clt** + swiss air

4600.160

helix **quattro** + swiss air

4600.150

helix **2.5** + swiss air

4600.140

### Package – panoramaxx series

### Item no.



panoramaxx **clt silver** + swiss air

4600.010

panoramaxx **quattro** + swiss air

4600.020

panoramaxx **2.5** + swiss air

4600.030

### Package – sphere series

### Item no.



crystal**2.0** + swiss air

4600.040

e**684** + swiss air

4600.050

vegaview**2.5** + swiss air

4600.060

### Package – other

### Item no.



neo **p550** + swiss air

4600.080

weldcap **bump** + swiss air

4600.090

weldcap + swiss air

4600.100

clear**maxx** + swiss air








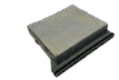
4600.110

## Spare parts and accessories

for swiss air only

### General accessories







### Item no.

	Half mask black	4160.500
	Nose foam for half mask	4160.530
	tightfit half mask, white, S	4160.550.W
	tightfit half mask, white, M	4160.560.W
	tightfit half mask, white, L	4160.570.W
	Exhalation valve for tightfit (set of 2)	4160.590
	6-12h battery, black, rechargeable	4554.010
	USB charger and cable	4554.070
	Extension for shoulder carrying unit, black	4556.035
	Headband for half mask, black (set of 2)	5003.700

### Particle filter accessories

	Particle filter (1 piece)	4088.402
	(set of 20)	4088.432
	Pre-filter for particle filter	4088.410
	(set of 50)	4088.410
	Mountain Breeze odour filter	4088.080
	(set of 20)	4088.080
	Spark guard for particle filter	4088.420
	(set of 2)	4088.420
	Filter cover for particle filter, black	4556.090
	Protection Cover	4551.650

### Combination filter accessories

	ABEIP combination filter	4088.450
	swiss air combination filter upgrade kit, contains: 1 ABEI combination filter, 1 filter cover, 1 spark guard, pack of 50 pre-filters	4088.455
	Pre-filter for combination filter	4088.451
	(pack of 50)	4088.451
	Filter cover for combination filter, black	4556.091
	Spark guard for combination filter	4088.820
	(set of 2)	4088.820

Further spare parts and accessories can be found at [www.optrel.com](http://www.optrel.com)

Trees are certainly the best suppliers of fresh air on our planet.

For the sale of every single optrel swiss air PAPER, optrel will plant a tree as part of a global reforestation project, which more than offsets the CO<sub>2</sub> footprint of the swiss air.

Because fresh air is important for all of us.



**climate  
neutral  
product**

For each product sold of this type, optrel plants one tree and neutralizes the carbon footprint of the product.

optrel supports Treellionaire. As a Treellionaire, you play an active part in combating the threat of deforestation, erosion and a warming planet. Reforestation creates jobs, combats poverty in developing countries and helps to fulfil the sustainability goals of the United Nations.

Every tree counts.

Your optrel dealer:



**optrel AG**  
Industriestrasse 2  
9630 Wattwil  
Switzerland  
www.optrel.com  
info@optrel.com

[optrel.com](http://optrel.com)



9412.093.03

The following applies to all products in this catalogue: Subject to errors, alterations and prior sale. The same applies to any images.