The all new

PANORAMAXX SERIES

Maxximize your horizon.

optrel®
swiss made

SEE WHAT YOU CAN DO

The light at the end of the tunnel. The new panoramaxx series.

The only similarity with a conventional welding helmet is that both are welding helmets.

Enhanced sight gives you the freedom to do what you want. Switch from tunnel view to panoramic view. The new panoramaxx series takes you into a new dimension of sight and allows you to do things that seemed unimaginable in the past.

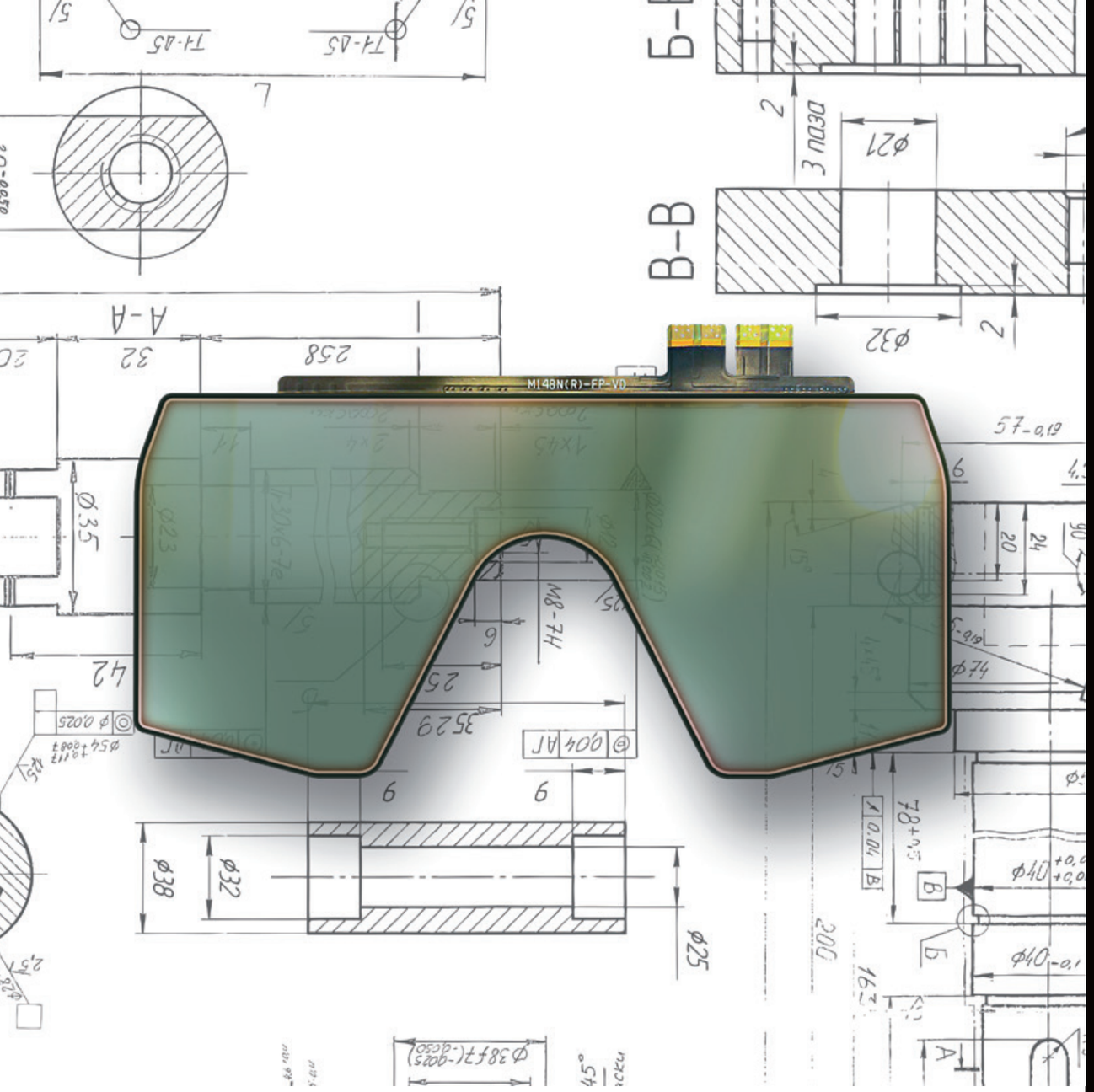
With the new panoramaxx series, optrel is keeping its promise to give welders a better working day.

The focus is not on the issue, but on finding a solution – we have thrown all conventions overboard and redesigned the welding helmet from scratch. The new panoramaxx series combines the latest technology and best materials with innovation in work physiology and ergomomics.

The result is the new panormaxx series, to which conventional welding helmets cannot compare.

As multi-layered and complex as these combined technologies are, welders' personal preferences regarding health and safety equipment are just as varied. Instead of developing a welding helmet for all possible applications, which mean welders have to accept many compromises, the new panoramaxx series focuses on individuality.

optrel's new panoramaxx series comprises of three models and is geared towards ambitious welding professionals who seek to weld the best seam every time. Maximum field of vision and crystal sharp clarity while welding are prerequisites for welders aiming to achieve perfection.



Closer. Further ahead.

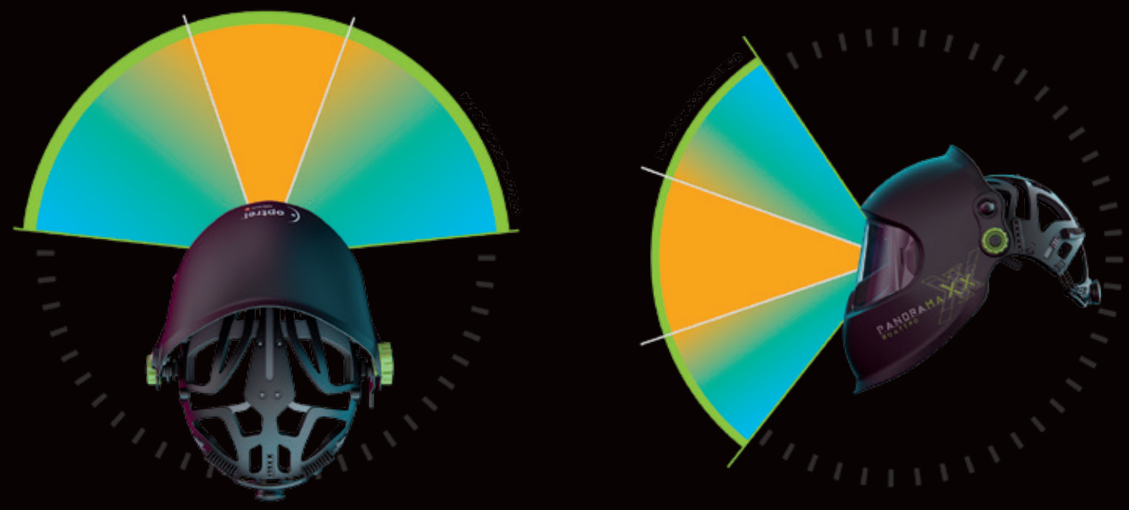
A nose cut-out changes everything.

Without a doubt, the nose is one of our most important organs and takes our senses into the fifth dimension. However, when it comes to enlarging the welder's field of vision with the anti-glare display, the nose can often get in the way.

Thus, we removed all conventional characteristics and created the innovative nose cutout to enhance comfort and visibility. The result is impressive. More than a 600% larger field of view without an increase in the weight and shape of the helmet. Additionally, this prevents you from breathing on the display and causing the lens to fog.

Our pragmatic approach is so new and innovative that several patents have been granted for it - and guarantees its uniqueness.

For comparison: A conventional ADF without nose cut-out would have to have a size of 180 x 120 mm (W x L) to achieve the same field of view as the panoramaxx Series.



Industry standard
optrel panoramaxx field of vision

PANORAMAXX 2.5

Welcome to the big leagues. The panoramaxx2.5 combines the enormous field of vision with optrel's well-known 2.5 technology and offers excellent visibility in every working situation – whether for welding, cutting, grinding or fabrication work. Whatever you want, the optrel panoramaxx2.5 automatically follows your versatile field of activity.

Big cinema, you decide the movie.

6x
Panoramic field of vision

Light level
2.5

Shade Levels
5-12

SHADE TRONIC

FADETRONIC

"After completing my apprenticeship as a metalworker, I have decided I want to work with professional equipment. I simply love the versatility of my job. Welding, grinding and fabrication. The panoramaxx2.5 is as versatile as my field of activity. The sublime field of vision helps me to master the various tasks easily and safely."

Luke, 23 years

/ Works as a metall worker in a small company
/ Plays guitar in a punk-rock band in his spare time
/ Loves it when no two days are alike

PANORAMAXX 2.5

As versatile as you.

PANORAMAXX QUATTRO

The panoramaxx quattro was developed for use in heavy metal construction, where work is often carried out with a lot of energy and in a wide variety of welding positions. Especially in constrained positions, there is no straight view of the welding point. Perfect viewing angle dependence, confirmed by the best test mark of 1 according to the EN 379 standard, guarantees that panoramaxx quattro welders always have the best view of the welding process without manual adjustment of the protection level. This results in uninterrupted and fatigue-free working with improved performance.

One helmet. Four top marks.

6x
Panoramic field of vision

DIN EN 379
1/1/1/1

Shade Levels
4-13

SHADE TRONIC

FADETRONIC

PANORAMAXX
QUATTRO

The best view in all positions.

Alex, 49 years

/ Works for a leading construction machinery manufacturer
/ On weekends he tours on his customized chopper
/ The harder the welding job, the better
/ Loves to have 300 ampere on his welding machine

"I weld complex structures in steel construction. Given that the heavy components cannot be moved, I have to weld a lot in constrained positions. Then in these positions, I always had uneven brightness levels in the corners of the ADF. These differences are completely gone in the new quattro. And thanks to the large field of vision, I can move safely through the structures and work without interruption. The panoramaxx quattro gets right to the point."

PANORAMAXX CLT

The world famous Crystal Lens Technology 2.0 is now also available in the panoramaxx clt version. optrel engineers have thus once again pushed the limits of what is possible to a new level.

Anyone who has ever welded with CLT technology will barely be able to believe their eyes.

The colour perception in the light state comes very close to the view through clear window glass and in the dark state you get a detailed and high contrast view of the welding pool in a clarity never seen before. Unlock your true potential – with the panoramaxx clt.

You will not believe your eyes.

6x
Panoramic field of vision

Light level
2.0

Shade Levels
4-12

SHADE TRONIC

FADETRONIC

PANORAMAXX CLT

Crystal clear view of the welding pool.

"I weld safety-related components made of stainless steel using the TIG process. Every weld needs to fit right away, otherwise it will be very expensive. Control over the weld pool and the uncompromising clear view of the colour gradient is absolutely crucial for me. That's why I decided on the panoramaxx clt."

Karl-Friedrich, 46 years

/ Works in pipeline construction for a large chemical company
/ Passionate hobby parachutist
/ Every new weld should be the best of his life

Comes with every optrel panoramaxx helmet as standard.

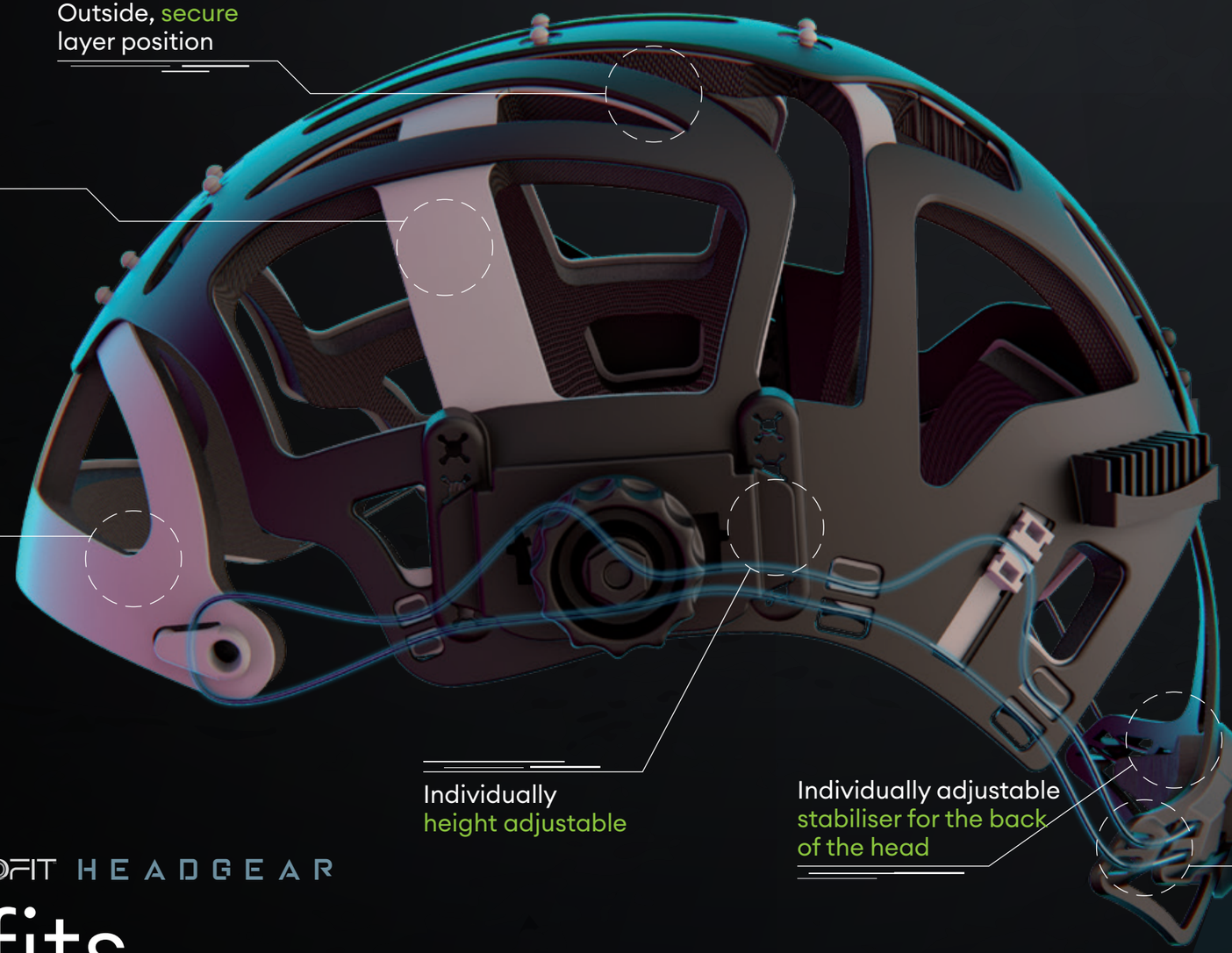
The optrel IsoFit® headgear sets a new standard in terms of wearing comfort. It is the only product worldwide that can be adjusted in width, length and height – i.e. three-dimensionally – to any head shape, so that the helmet really fits "like a glove". panoramaxx 2.5, quattro and clt all come with this headgear as standard.

Large, replaceable comfort pad to make wearing it pleasant offers 100% more contact surface for perfect weight distribution

Outside, secure layer position

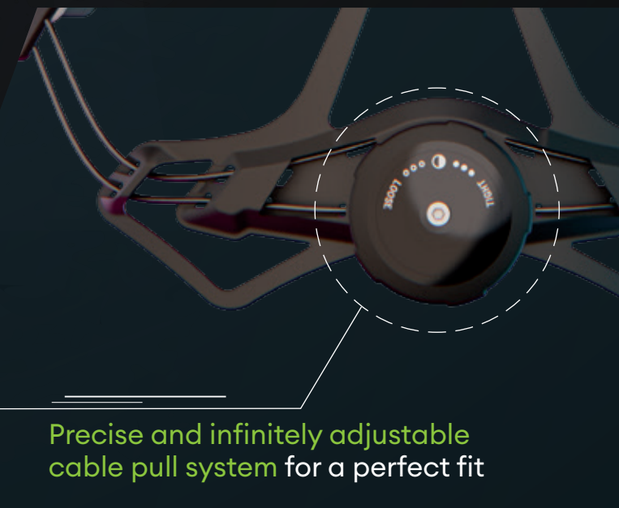
Inside, flexible layer support

Individually adjustable forehead stabiliser



Individually height adjustable

Individually adjustable stabiliser for the back of the head



Precise and infinitely adjustable cable pull system for a perfect fit

With a quick release function to allow it to be opened in milliseconds

OPTREL ISOFIT HEADGEAR

Just fits perfectly.

The optrel panoramaxx as a personal assistance system.

Fully equipped as standard.

In addition to the large field of vision and crystal-clear optics, which form an actual assistance system, all members of the panoramaxx series are equipped with the latest digital electronics. The patented Shadetronic and Fadetronic technologies in combination with the 5-point sensor system and the re-charge energy concept are the core elements.

They enable welders to focus on their work and allow them to work without interruption. This results in quality and efficiency. Thanks to the ergonomic design of the perfectly fitting optrel IsoFit® headgear, the panoramaxx is light as a feather and fatigue-free. All panoramaxx welding helmets are highly robust at the lowest weight and protect users against external mechanical impacts such as high speed particles which hit the helmet at up to 120 m/s. And thanks to grinding mode, which can be easily operated externally, and the incomparable appearance, even grinding work is more fun.

ShadeTronic®

Setting the correct shade level is the most important and at the same time the most neglected function on a welding helmet. This important task is performed by the patented optrel ShadeTronic® technology. A highly developed light sensor permanently measures the intensity of the welding arc and regulates the glare protection in the active state continuously from protection level 4 to the maximum protection level 13 fully automatically. This enables the welder to achieve optimum dimming and thus uninterrupted work at any welding light intensity. Experience the ShadeTronic® technology in the hot start at the beginning or during the crater filling function at the end of the welding process or simply when welding with different intensities.

TrueColor view

All panoramaxx welding helmets are characterized by a realistic color perception, which can be adjusted to the the scope of duties coordinated. The Swiss made UV-IR-protective filters consist of more than 30 ultra-thin high-tech layers, which provide the most natural and clearest view of the welding task in the respective task area. Whether for all-round tasks with 2.5, heavy metal construction with quattro or metal surgery with Crystal Lens Technology: the filter perfectly matched to the task is built into every system.

optrel re-charge

The unique and environmentally-friendly optrel re-charge energy concept ensures that welding helmets always have enough energy. Thanks to the latest solar technology, a rechargeable lithium-polymer battery is recharged either by the welding light or by the ambient light. In addition, the battery can also be charged directly with any USB charger via a micro-USB interface. The tiresome changing of batteries is no longer necessary and the environment is protected.

FadeTronic

With the patented optrel Fadetronic technology, the opening of the anti-glare display can be continuously adjusted after welding. The unpleasant afterglow is faded out – especially for high ampere applications. Eye fatigue is significantly reduced thanks to the display opening smoothly and being adapted to the eye.

5-point Detection

The optrel 5-point detection integrated in the panoramaxx series is an intelligent sensor control with five sensors. Sophisticated software and clever positioning of four sensors at the corners and one sensor in the upper centre ensures the glare shield is switched on and off perfectly, even in the most difficult lighting conditions and in constrained positions, as well as permanent dark level adjustment (Shadetronic®, patented) during welding.

Grinding mode

Like most optrel welding helmets, the products in the panoramaxx series have a grinding mode. It can be conveniently operated externally by means of a robust and well-protected pressure switch. Once activated, the anti-glare display remains deactivated, which guarantees trouble-free grinding work. At the touch of a button, the glare shield is then immediately ready for welding work. Your optrel welding helmet becomes a true multifunctional work safety device.

The optrel e3000X blower respiratory protection system.

Professional respiratory protection is a must in most work environments.

TH3 certified

optrel respiratory protection systems are uncompromisingly designed for professional use. The optrel e3000X with TH3 particle filter of the highest safety level filters 99.8% of harmful particles out of the air.

- Provides reliable protection against smoke, aerosol and dust
- Can be extended to include an A1B1E1 gas filter
- Automatic air flow control and adjustment
- 18 hour battery as standard

optrel PAPR systems are uncompromisingly designed for professional use.

During welding, grinding and many other dust-intensive activities your airways are exposed to harmful fumes, dust and toxic gases. These dangers are not visible to the human eye so wearing an optrel PAPR is essential and often a legal requirement no matter how well ventilated your work place is.

What belongs together comes together.

Many welders not only need a great welding helmet but also a suitable respiratory protection system. The panoramaxx **Ready-to-Weld packages** contain the PAPR version of the helmet with the optrel IsoFit® headgear, e3000x blower unit, high quality leather belt, TH3 filter and prefilter, standard 18 hour battery, connection hoses and a fully branded optrel holdall for storing your PPE.

Product comparison

	PANORAMAXX 2.5	PANORAMAXX QUATTRO	PANORAMAXX CLT
Extended panoramic field of vision	✔	✔	✔
ShadeTronic® (fully automatic protection level adjustment with individual calibration option of ± 2)	✔	✔	✔
Suitable for welding overhead and in a constrained position	✔	✔	✔
Ampere range	Up to 280 A Protection levels 5-12	Up to 350 A Protection levels 4-13	Up to 280 A Protection levels 4-12
Light level	2.5	3.0	2.0
FadeTronic	✔	✔	✔
EN 379 classification	1/1/1/2	1/1/1/1	1/1/1/2
Grinding mode	✔	✔	✔
Power supply	Solar cells, Li-polymer battery, can be charged via micro-USB cable, battery life 300 to 500 charging cycles		
Sensor system	Five sensors	Five sensors	Five sensors
Sensitivity	Continuously adjustable, new with "Super High" sensitivity and tack mode		
Switching time	Light to dark: 0.090 ms at 20°C 0.070 ms at 55°C Dark to light: 0.1 s to 2.0 s (with FadeTronic)	Light to dark: 0.090 ms at 20°C 0.070 ms at 55°C Dark to light: 0.1 s to 2.0 s (with FadeTronic)	Light to dark: 0.090 ms at 20°C 0.070 ms at 55°C Dark to light: 0.1 s to 2.0 s (with FadeTronic)
Dimensional stability	Welding mask: up to 220 °C, viewing pane: up to 137°C		
Eye protection	Ultraviolet/infrared protection: Maximum protection over the entire protection level range		
Resistance against energy impact, helmet shell	B (Impact at medium energy, resistance to a ball with a diameter of 6 mm, 0.86 g, 120 m/s)		
Operating temperature	-10°C to + 55°C/ 14°F to 131°F		
Storage temperature	-20°C to + 70°C/ -4°F to 158°F		
Gross weight	575g (20.3 oz) / PAPR 745g (26.3 oz)	575g (20.3 oz) / PAPR 745g (26.3 oz)	silver 610g (21.5 oz) / PAPR 780g (27.5 oz) black 600g (21.2 oz) PAPR 770g (27.2 oz)
Areas of application	All electrical welding processes: Electrode welding (Stick Welding, SMAW) / MIG/MAG (Metal Shielded Arc Welding, GMAW) / GMAW High Performance Welding / Filler Wire Welding / TIG Welding (TIG, GTAW) / Plasma Welding / Plasma Cutting / Gas Welding / Grinding in Grinding Mode / ***Not suitable for gas and laser welding!***		
Scope of supply	Welding helmet, operating instructions, storage bag, micro-USB charging cable, viewing pane, warranty card		
Standards	CE, ANSI, EAC, AS/NZS, compliant with CSA Z94.3, additionally with PAPR version EN 12941 (TH3) and suppliedair version EN 14594 (3B) Compliant with pr ISO 16321 standard „WIG+“ („low amp Tig“)		
Warranty	2 years, Additional 1-year warranty extension (battery excluded) for product registration within the first 6 months at register.optrel.com		

Products

Welding helmets and accessories	Item no.
optrel panoramaxx2.5 welding helmet (SN 2.5/5-12 ShadeTronic®) – black	1010.000
optrel panoramaxx2.5 fresh air helmet (SN 2.5/5-12 ShadeTronic®) – black	4441.660
optrel panoramaxx2.5 RTW Ready-to-Weld Package, incl. e3000X PAPR system, panoramaxx2.5 fresh air helmet black and e3000/X bag	4550.550
optrel panoramaxx quattro welding helmet (SN 3/4-13 ShadeTronic®) – black	1010.100
optrel panoramaxx quattro fresh air helmet (SN 3/4-13 ShadeTronic®) – black	4441.760
optrel panoramaxx quattro RTW Ready-to-Weld Package, incl. e3000X PAPR system, panoramaxx quattro fresh air helmet black and e3000/X bag	4550.560
optrel hardhat EN 397 industrial safety helmet, available in black, white, red, orange and yellow	5011.130 5011.131 5011.132 5011.133 5011.134
optrel e3000X blower respiratory protection system with 18h Power battery and bag	4553.000

Welding helmets and accessories	Item no.
optrel panoramaxx clt welding helmet (SN 2/4-12 ShadeTronic®) – black	1010.200
optrel panoramaxx clt welding helmet (SN 2/4-12 ShadeTronic®) – silver	1010.201
optrel panoramaxx clt fresh air helmet (SN 2/4-12 ShadeTronic®) – black	4441.780
optrel panoramaxx clt fresh air helmet (SN 2/4-12 ShadeTronic®) – silver	4441.781
optrel panoramaxx clt RTW Ready-to-Weld Package, incl. e3000X PAPR system, panoramaxx clt fresh air helmet black and e3000/X bag	4550.580
optrel panoramaxx clt RTW Ready-to-Weld Package, incl. e3000X PAPR system, panoramaxx clt fresh air helmet silver and e3000/X bag	4550.590
optrel hardhat adapter Usable with all optrel helmets	5011.180
optrel backpack for helmets	8000.100

Spare parts and accessories		Item no.
1	Front cover lens external (set of 5)	5000.270
2	Nose protection pads (set of 2)	5003.600
3	Inside cover lens (set of 5)	5000.010
3a	Magnifying lens +1.00 Magnifying lens +1.50 Magnifying lens +2.00 Magnifying lens +2.50	5000.150 5000.151 5000.152 5000.153
4	IsoFit® headgear, black, black buttons IsoFit® headgear, black, green buttons IsoFit® headgear, black, grey buttons	5003.290 5003.291 5003.292
5	Replacement pads for Tricot pad suitable for optrel IsoFit® headgear (5x, each consisting of 4 parts)	5004.290
6a	Head and neck protection, leather	4028.016
6b	Head and neck protection fresh air helmet, leather	4028.031
7	Chest protection, leather	4028.015

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