

AVAILABLE IN THREE VERSIONS
TECHNICAL DATA



SPHERE X
QUATTRO

Art. no. 1006.580
pure air: Art. no. 4441.605



SPHERE X
CLT

Art. no. 1006.980
pure air: Art. no. 4441.905



SPHERE X
2.5

Art. no. 1006.680
pure air: Art. no. 4441.905

Field of view over 30% larger
(compared to the sphere series)

System weight of
sphereX welding helmet
incl. IsoFit® X headgear

optrel hart hat
(according to EN 397 standard)

ShadeTronic®
(fully automatic protection
level adjustment, infinitely
variable, can be switched off)

Brightness level

Overhead welding and
welding in extreme positions

Position Locker (safe open and
closed helmet position)

FadeTronic (Twilight mode)

Classification

Power supply

Areas of application

All electric welding processes

Grinding with Grind mode

Sensors

Sensitivity

Standards and norms

Warranty

IsoFit® X Headgear
inclusive

Shade levels 5 – 13
with ShadeTronic®
(5 – 13 manual)

3.0

✓

✓

✓

ISO 16321-2 V1 (best viewing
angle dependence class)

Battery (approx. 1500 hrs
operating time)

High-ampere applications,
heavy-duty steel construction

Electrode welding (stick welding, SMAW) / MIG / MAG (gas metal arc welding, GMAW) / GMAW
GMAW high-performance welding / flux-cored wire welding / TIG welding (GTAW) /
plasma welding / micro plasma welding / plasma cutting
gas welding, grinding work in grinding mode

Not suitable for laser welding!

✓

5 sensors

Infinitely variable adjustment, now with “Super High” sensitivity

CE, ANSI, EAC, UKCA, AS/NZS, CSA Z94.3 complied with

2 years for manufacturing and material defects, 6 months for battery
1 year additional (battery excluded) for online product registration within the first 6 months
(from date of purchase) on optrel.com/register

2.0

✓

✓

✓

EN 379 1/1/1/2

Battery (approx. 1500 hrs
operating time)

Ideal for TIG

2.5

✓

✓

✓

ISO 16321-2 V2 (viewing angle
dependence)

Battery (approx. 1500 hrs
operating time)

All-rounder

✓

5 sensors

Infinitely variable adjustment, now with “Super High” sensitivity

CE, ANSI, EAC, UKCA, AS/NZS, CSA Z94.3 complied with

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optrel AG
Industriestrasse 2
CH-9630 Wattwil
Schweiz
info@optrel.com
www.optrel.com

optrel.com



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SPHERE X
SERIES



NEW

Field of view over
30% larger!

Your view into infinity



Light State
2-3*

*depending on model



Position Locker



IsoFit® X
Headgear



optional
industrial safety
helmet



PROTECTING
PROFESSIONALS

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



Perfect for your mission

A welding helmet of the next generation – developed for perfect results.

Take advantage of its clever features now:

- A **field of view** that is **over 30% larger**, combined with **Crystal Lens Technology (CLT)** for a perfect viewing experience in every situation.
- Three-dimensionally adjustable **IsoFit® X headgear** for increased comfort. Ideal for work where a helmet is required thanks to its **integrated industrial safety helmet adapter**. You can easily attach the **industrial safety helmet with just 2 clicks**.
- Stabilisation of your helmet shell with our **two-position locking function (Position Locker)**, because we always offer you comfortable and safe working solutions.
- Proven technologies such as **ShadeTronic®** and **Multi-Sensor Detection with 5 sensors** ensure that your PPE keeps pace with technological advances in safety.
- The **smoke-repellent helmet shell design** protects your health even better against harmful substances and always gives you a clear view. For higher quality work with fewer errors.

What makes CLT different from other technologies?

While standard helmets depict the world in neutral tones, CLT 2.0 renders exact colours across the entire spectrum, in high contrast and with unparalleled brightness. The result is a **precise** and **true-colour view** of the welding area. This makes it easier for you to machine the weld pool while offering an unimpeded and **crystal-clear view** of the entire work area before, during and after welding. All of this is possible **thanks to a high-tech coating process** which is carried out in a vacuum chamber with atmospheric conditions simulating the space environment.

Try it now and experience the difference!

SPHERA X SERIES



SPHERA X CLT

Perfect for TIG and precision welding

Vision like indaylight – even in the lowest ampere range. Ideal for delicate seams and the highest demands.

- Crystal-clear brightness level 2.0 for an optimum view, even between the welding points
- Perfect for stainless steel, aluminium and thin sheet metal
- Minimal colour distortion, highest level of detail



SPHERA X QUATTRO

For high-ampere applications and heavy-duty steel construction

Maximum protection when working with the very highest of currents. Unbeatable viewing angle class VI combined with colour fidelity for precise seam inspections.

- Perfect for heavy-duty constructions
- Protection levels 5–13 for extreme applications
- Robust design for harsh environments



SPHERA X 2.5

The all-rounder for everyday use

Versatility meets comfort – for welders who have to tackle new challenges on a daily basis.

- TrueColor view for realistic colours
- Protection levels 5–12 for MIG, MAG, electrode welding and grinding
- Durable, lightweight and versatile

PAPR Versions available!

Also available in Ready-to-weld (RTW) kits - a complete solution for even greater safety:



NIOSH Approved PAPR helmet with e3000x respiratory protection blower and carry bag
Available in all lens versions