

Technical data

Article N°	1010.302		
Product description	panoramaxx hybrid clt - black: Laser- / welding helmet with Crystal Lens Technology and color realistic panoramic view, variable shade level with ShadeTronic® 2.5/4-12 (manual 3-8, recommended for laser welding), opening delay with FadeTronic, grinding mode, sensitivity adjustment, optrel re-charge, optrel IsoFit® headgear.		
Headgear	optrel IsoFit® headgear with Position Locker		
ADF size	90 x 110 x 9.5 mm / 3,54 x 4,33 x 0,37" 50 x 100 mm / 1,96 x 3,94" (Sichtfeld)		
Power supply	280mAh Li-Polymer battery rechargeable via micro USB connector and solar cell		
Battery lifetime	300 to 500 charging cycles		
Sensors	Five sensors		
Sensitivity regulation	Continuously variable sensitivity adjustment with "super high" sensitivity range. Passes according to ISO 16321 "+TIG" the "low amp Tig" procedure		
Light transmission	Ultraviolet/infrared protection	maximum in the entire protection level range	
	Visible range activated	Protection level 4 – 12 (ShadeTronic®), 3-8 (manual)	
	Visible range not activated	Protection level 2.5	
Switching times	Light to dark	90 µs (0,090 ms)	at room temperature
		70 µs (0,070 ms)	at 55°C / 131°F
	Dark to light	0,1 s up to 2,0 s	(with FadeTronic)



The laser helmet panoramaxx hybrid clt consists of the following components:

Component	Protection group	Marking
Laser filter panoramaxx hybrid clt	Eye- protection	16321 OS W2.5/3-8/4<12 V2 +TIG 1000-1100 D LB7 IR LB8 OS 1000-1100 OD7 C5 PS3 ISO 19818-1 OS CE
Laser protection frame	Eye- protection	1000-1100 D LB7 IR LB8 OS 1000-1100 OD7 C5 PS3 ISO 19818-1 OS CE
Welding shell (Polyamide)	Face- and head- protection	16321 OS W15 E 1-M 1000-1100 D LB4 IR LB8 OS B 1000-1100 OD5 C2 PS3 ISO 19818-1 OS E CE
Cover plate (Polycarbonate)	Safety plate	OS B CE

Shape stability	Welding mask up to 220°C / 428°F Front cover lens up to 137°C / 278°F
ADF protection	Front cover lens and inside cover lens
Mask material	PA6.6
Color mask / design	black
Operating temperature	-10°C up to +55°C / +14°F up to +131°F
Storage temperature	-20°C up to +70°C / -4°F up to +158°F
Weight	685 g / 24.02 oz
Areas of application	All electrical welding processes Electrode welding (Stick Welding, SMAW) / MIG / MAG (Gas Metal Arc Welding, GMAW) / GMAW high-performance welding / flux-cored wire welding / TIG welding (TIG, GTAW)/ plasma welding / microplasma welding / plasma cutting Gas welding, grinding work in grinding mode Suitable for laser welding! Laser range 1000 - 1100 nm
Scope of delivery	Welding helmet, operating instructions, storage bag, micro USB charging cable, warranty card

Standards

CE, UKCA, complies to ANSI Z87.1, AS/NZS 1337.1, AS/NZS 1338.1, CSA Z94.3

Warranty

2 years from the date of purchase for manufacturing and material defects (excluding battery). 1 additional year if the product is registered within the first 6 months (from date of purchase) at optrel.com/register.