


**GENERAL DATA**

**Division :** Head Protection  
**Family :** Eye and Face Protection  
**Range :** Welding  
**Line :** PAPR  
**Sub Sub Sub Family :** Expert  
**Brand formerly known as :** OPTREL  
**Business Countries**  
 Middle East  
 EMEA  
 United Kingdom  
**Activity Domains :**  
 Welding


**Product Use :**
**PRODUCT ADVANTAGES**
**Feature :**

By using new battery technology, an updated face seal, a stronger protective sleeve and an optimised air duct coupling, the Optrel e1100 is even more user friendly as the OS 100 was. But not only the system itself has been updated, but also the service:

**1. Two years warranty and repair service:**

Thanks to the extended warranty time of two years, the buying decision is made easier. Following the warranty period we can repair your system. For further information please have a look to [www.optrel.com](http://www.optrel.com)

**2. New face seal:**

The newly designed face seal offers increased comfort for the wearer. It is made of a flexible comfortable to wear textile with outstanding sealing properties. Thanks to this new face seal, the Optrel e1100 guarantees the protection level TH2P in Europe.

**3. New battery technology:**

Thanks to the new lithium ionic battery-technology, the standard battery for the Optrel e1100 now offers the same life time as the OS100's long life battery and this to a much lighter weight.

**4. Optimised air duct coupling:**

The efficient coupling system of the Optrel e1100 allows the air supply hose and blower to be easily removed from the helmet to allow the welder to move more freely.

## TECHNICAL DESCRIPTION

**Shade Level :**

4/10-11

**Sensitivity Adjustment :**

no

**Special Features :**

no

**Protection :**

reflection free front cover lens

**Adjustement of the detection angle :**

yes

**Delay Function :** No**Switching Time Back Dark to Light :**

0,2 - 0,3 s

**Switching Time Light to Dark :**

0,4 ms / 20 °C

**Viewing Area :**

38 x98 mm

**Sensor :**

2 above the eyes<sup>1</sup>

**Optical Class :**

1

**Scattered Light :**

1

**Homogeneity :**

2

**Power Supply :**

Solar cells and batteries

**Operating Temperature****From :**

- 10 °C

**To :**

+ 70 °C

**Cartridge size****Length :**

110 mm

**Height :**

90 mm

**Weight :**

106 g

**Total weight :**

420 g

**Operating Temperature****Particule :**

TH 2

**Gas**

None

Usable in explosive environment according to EN 12942 No

**Flow rate :**

> 150 L/min

**Material :**

Polyamid

**Fan :**

high quality ball beared fan motor

**Fuse :**

electronic fuse

**Noise :**

max. 70dB

**Alarms :**

Optic

Audible

Low power

Filter missing

low air flow

**Dimensions :**

249 x 213 x 87 mm

**Weight :**

1205 g

**Color :**

blue / orange

**Filter :**

1 x P(SL)

**Hose :**

1160 mm with protection sleeve

**Battery :**

Long Life

Standard

**Battery type :**

Li-Ion rechargeable

**Battery Voltage/Capacity :**

11,1 V / 4,8 or 7,2 Ah

**Battery charging cycles :**

> 1000

**Battery charging time :**

approx 5 or 8 h

**Battery weight :**

420 or 565 g

**Battery Charger :**

Microprocessor controlled, fully automatic

**Battery Plug :**

Plug EU, UK and US

**Battery Approved to :**

EN 12941:1998, GOST-R

**Battery Notified body :**

1024

**Battery EMV Directives :**

89/336/EEC

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## ADDITIONAL INFORMATION

### Accessories :

Designation	Article No.
Filter P SL R	4088.000
Optrel e1100 blower incl. filter, battery, charger, air hose, protective sleeve, flowmeter, fabric belt with leather back-support, manual & storage case	4251.000
Fabric belt with leather back-support	4155.002
Fabric belt without leather back-support	4155.030
Leather belt without leather back-support	4155.004
Air-flowmeter	4155.000
Air hose	4155.021
Air hose & protective sleeve	4155.022
Protective sleeve	4155.003
Face seal	4160.000
Storage case	4074.001
Charger EU/UK	4255.001
Battery "Standard" (Li-Ion, 4.8Ah)	4255.006
Battery "Longlife" (Li-Ion, 7.2Ah)	4255.007
Leather head- & neck protection for PAPR welding helmets	4028.031
Replacement helmet shell Optrel e680, dark blue with air duct & face seal (without cartridge)	4241.003
Replacement helmet shell Optrel e670, cosmic green with air duct & face seal (without cartridge)	4261.001
Replacement helmet shell Optrel e650, black (uncoated) with air duct & face seal (without cartridge)	4261.000
Replacement helmet shell Optrel e640, black (uncoated) with air duct & face seal (without cartridge)	4281.000

### Life Cycle :

Check the safety helmet / blower regularly in accordance with the operating instructions / user manual.

If the unit is in storage, the battery must be recharged every 4 months

### EAN Code :

7640127610619

## CERTIFICATION AND CONFORMITY

### European Directives :

89/686/EEC

EC Category PPE\* : Category III

### Standards :

EN379

### Quality Assurance :

ISO 9001 / 2000

### EC Attestation Number :

235/E-032/2008

### Laboratory :

Occupational Safety Research Institute

\*PPE : Personal Protective Equipment

**EC CONFORMITY DECLARATION****The manufacturer or its legal representative supplier settled in the European Community:**

Sperian Protection Europe

**Declares that the next Personal Protective Equipment described here after is in conformity with the provisions of Council Directive 89/686/CEE:**

Designation: Optrel e1100 with e640 black untreated

Reference: 4280.000

Standard(s): EN379

**This PPE is the object of the above EC attestation type:**

235/E-032/2008

**Delivered by:**

Occupational Safety Research Institute

Jerusalémska 9

116 52 Praha 1

**Made at** Wattwil, **on the** 07/15/2008

**By:** A. Boos

**Division:** Head Protection



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# Occupational Safety Research Institute, v.v.i.

Jeruzalémská 9, 116 52 Praha 1, Czech Republic

Authorized Body 235

Notified Body 1024



## EC TYPE EXAMINATION CERTIFICATE No. 235/E-032/2008

This EC Type Examination Certificate is issued to:

**Manufacturer:** Sperian Welding Protection AG, Industriestrasse 2, CH-9630 Watwil

**identification number:** 756

**PPE product:** Welding helmets Optrel e640, Optrel e650, Optrel e670 and Optrel e680 combined with blower Optrel e1100 TH2

It is certified that the manufacturer's technical file and above mentioned PPE product have been assessed and found to be in accordance with the basic health and safety requirements of Government Order 21/2003 Coll., which implements Council Directive No. 89/686/EEC "Personal Protective Equipment" as amended by Council Directives 93/68/EEC, 93/95/EEC and 96/58/EEC, as recorded in Report No.235/ZZ-027/2008, which is an integral part of this Certificate.

When examined the model was found to meet all of the relevant requirements of the appropriate harmonized standard(s):

EN 12941:1998 Respiratory protective devices. Powered filtering devices incorporating a helmet or a hood. Requirements, testing, marking.(idt. CSN EN 12941:99)

Marking and instructions have been assessed in the Czech language only.

For and on behalf of Occupational Safety Research Institute  
- Authorized Body 235, Notified Body No. 1024:

**Date of Issue:** 15.7.2008

RNDr. Stanislav Malý, Ph.D.

Description and picture of the PPE product:



Optrel e640



Optrel e670



Optrel e650



Welding helmet Optrel e680 and blower Optrel e1100

Welding helmets Optrel e640, Optrel e650, Optrel e670 and Optrel e680 are compatible with blower Optrel e1100 TH2 equipped with filter against particles; the set provides protection against harmful aerosols in accordance with the information supplied by the manufacturer.



Graphical appearance of CE mark. In the event of the involvement of a notified body in the stage of manufacturing check its distinguishing number shall be added to CE mark.