Helmet Mounted Torch – Lamp XP-R1

Technical Datasheet



The XP-R1 flashlight is MSA's latest external lighting solution combining high performance lighting beam and high visibility position light in a rechargeable, compact helmet mounted lamp design. Developed in collaboration with PELI, it provides an unmatched lighting experience in tough firefighting environments.

Key Features and Benefits

- ✓ High performance helmet mounted flashlight, with constant lighting operation
- ✓ ATEX / IECEx approval (zone 0) for safe use in hazardous environment
- ✓ Replaceable helmet interface plate for easy maintenance
- ✓ Position light (red) with rear and side visibility
- ✓ High mechanical and thermal resistance
- ✓ Hi-visibility yellow body with photoluminescent shroud



Technical Specifications

	Description
Light output modes	Constant light output for 6 hours Complete run time 8.5 hours minimum (ANSI FL1) Reserve mode for safe evacuation when low battery Flashing emergency mode to enhance visibility
Color	Hi-viz color with photoluminescent shroud
Operation	Rear switch, easy to operate with gloves
Power supply	Rechargeable Li-ion battery, specific PELI design (Atex zone 0)
Light source (main beam)	High Performance LED, 7100K – 8300K
Light source (position light)	Lateral Red LED
Materials	Lamp body: High visibility Polycarbonate blend Lamp shroud: Photoluminescent, antistatic thermoplastic Interface plate: High visibility Polycarbonate blend

Dimension and approvals

Characteristic	Description
Dimensions	Length: 160 mm / Width: 42 mm
Weight	180 g (including batteries)
Approvals	Atex Zone 0 - Ex II 1 G Ex ia op is IIC T4 Ga
IP rating	IP67 (30 mins under 1m of water)
Charging	Charging time: approx. 6.5 hours

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Note: to ensure proper lifetime of the battery, it is highly recommended
to fully charge the battery at least once a year

Performance specifications

	Description
Maximum light output (ANSI FL1)	189 lumens
Constant light output	6 hours @170 lumens (± 5 lumens)
Run Time (ANSI FL1)	8.5 hours minimum
Max beam distance (ANSI FL1)	160 meters
Peak beam intensity (ANSI FL1)	6,000 Candela

ANSI FL1 standard parameters

- Light output (lumens): measured in an integrated sphere, 30s after switching off the light
- Run time (h): continuous time elapsed until output power drops below 10% of the original value
- Beam distance (m): distance at which the light beam is 0.25 lux
- Peak beam intensity (candela): maximum luminous intensity along the central axis



The enclosed diagram is indicative. Performance (output power, burn time) may vary depending on temperature and battery service life. Measurements are made at an ambient temperature of 20°C.

Ordering information

Part number	Description
GA1415	Lamp XP-R1, LED, rechargeable (charger not included)
GA1418	Individual Charger, Micro USB, XP-R1 (USB cable included)
GA1419	USB / AC Adaptor, with international AC plugs
GA1416	Helmet mounting interface plate, XP-R1
GA1417	Replacement Battery pack, XP-R1