



The BEST solution for LASER WELDING / CUTTING



100LW

Laser welding helmet

ALL-AROUND SAFETY AGAINST LASER EXPOSURE

The 100LW Laser welding helmet is specifically designed for laser welding/cutting application to protect users. The variable shade laser lens provides full protection against direct laser exposure, as well as reflection, scattering, diffraction, and divergence from the laser beam. Meanwhile, it offers protection against UV/IR/ blue light.



Laser
Protection



High-impact
Resistance



Heat
Resistance



Patented
Design



Super
Clear Vision



Laser Protection:
1000-1100 D LB7 + IR LB8
Optical density (OD) 10 @ 1064nm

Effective laser protection

Designed to meet EN207 OD10 @ 1064nm, the 100LW provides full protection to prevent eye burns, retinal damage and other tissue damage.

Ultra-clear vision

Experience exceptional clarity and details with TECMEN's light state 2.0 variable shade laser lens. Superior vision quality leads to superior work quality.

Smart adjustment

Shade number, delay and sensitivity all easily adjustable using our user-friendly panel with LED indicators.

Specifications

Viewing Area	96 x 46.5 mm (3.78" x 1.83")
Cartridge Size	110 x 90 x 9 mm (4.33" x 3.54" x 0.35")
Optical Class	1 / 1 / 1 / 2
Number of Sensors	2
Power On / Off	Automatic On / Off
Dark Shades	4-8/8-12
Light State	2.0
Switching Speed	1/25,000 s. from Light to Dark
Special Modes	GRIND / CUT / MIX / DARK

Sensitivity Control	Low - High, LED and button control
Delay	0.1-1.0 s, LED and Button Control
UV / IR Protection	Up to Shade DIN16 at all times
Operating Temp.	-10°C to 55°C (14°F to 131°F)
Storing Temp.	-20°C to 70°C (-4°F to 158°F)
Helmet Material	High Impact Resistance Nylon
Laser Protection	1000-1100 D LB7 + IR LB8
Optical Density (OD)	1000-1100 OD8
Approvals	CE (EN207, EN ISO 16321)

FreFlow™ V1 PAPR

with 100LW-V respiratory laser welding helmet

MAKE LASER WELDING SAFE AND BREATHABLE

All-in-one integrated PAPR system for laser welding/cutting. The 100LW-V helmet provides full protection against direct laser exposure, as well as reflection, scattering, diffraction, and divergence from the laser beam. Meanwhile, the FreFlow V1 blower unit delivers a stable airflow to users with clean air.



Filter efficiency
>99.997%

Model No.: FreFlow V1 100LW-V

FreFlow™ Powered Air-purifying Respirator Filter Schematic

FreFlow V1 PAPR is compact, flexible, and portable, with easy maintenance. It ensures a constant airflow delivery, even when the battery is low or the filter is clogged.

- A Durable front cover
- B Spark screen
- C Pre-filter
- D Particle filter
- E Gas filter
- F Odor filter
- G Fast rechargeable Lithium battery
- H High quality brushless motor
- I Optional airflow rates
- J Hose

Respirator Specifications

Model	FreFlow V1 100LW-V
Airflow Rate	Manufacturer's minimum design flow rate: 165+lpn (5.8+cfm) Low speed: 170+lpn (6+cfm) High speed: 210+lpn (7.4+cfm)
Fast-charging Battery	Battery type: rechargeable Li-ion battery Standard battery duration: 170+lpn - 9 hours; 210+lpn - 6 hours Extended battery duration: 170+lpn - 15 hours; 210+lpn - 9 hours Standard battery charge time: 1 hour Extended battery charge time: 2 hours Battery life: ≥ 550 charges
Filter	Filter efficiency: > 99.997% Alarms: Visible, audible and vibration Particle filter (P3 Filter) Gas filter (A1B1E1K1/A2/Odor Filter)
Temperature	Operating temperature: -5°C to 55°C (23°F to 131°F) Storage temperature: -10°C to 55°C (14°F to 131°F)
Relative Humidity (R.H.)	Operating R.H.: < 90% Storage R.H.: < 85%
Weight	1020g (Blower unit + fast-charging standard battery)
Respirator Approval	EN 12941 P R SL, AS/NZS 1716 CE AS/NZS ERI

* This PAPR product is not suitable for the applications which request Intrinsic safety (IS).

