BT / TECMEN PAPR FREFLOW

Exceptional quality welding helmet and powered air purifying respirator system combination, working together to protect the welder from arc radiation, spatter, dust, pollutants, fine particles as well as other contaminants.

APPLICATIONS

Respirators can be used in many different industrial fields such as polishing, welding and metalworking.

- MIG, TIG & Stick welding
- Plasma Cutting
- Grinding

IEXP TM1000





IEXP TM1000



Large viewing area: 107 x 75mm
Highest Optical Class 1 / 1 / 1 / 1
See True Colours with "ReaLens™ Technology"
Digital Display Control with 3 Modes



Easy Lift Up for Grinding &
Shade 5 Lens on Both Sides



Panoramic View
Lightweight Material &
High Impact Resistance Nylon



Adjustable Pivot Headgear
& Face Seal



CLASSIFICATIONS / APPROVALS

Helmet: DINplus, CE,ANSI Z87.1, CSA Z94.3, AS/NZS1337.1, 1338.1

1/1/1/1 HIGHEST OPTICAL CLASS

To qualify for a EN379 rating, the auto-darkening lens get tested and rated in 4 categories: Optical class, Diffusion of light class, Variations in luminous transmittance class, and Angle dependence on luminous transmittance class. Each category is rated on a scale of 1 to 3, with 1 being the best (perfect) and 3 the worst.

With no glare or interference, BT TECMEN brings ultra-clear vision to users and helps them to be more concentrated and greatly improve welding efficiency.



Light State



Dark State # 9

HELMET SPECIFICATIONS	IEXP TM1000
Auto Darkening Filter (ADF) Model	950 iEXP
Optical Class	1 / 1 / 1 / 1
Viewing Area	107 x 75 mm
Helmet Material	High Impact Resistance Nylon
Arc Sensor	4
Light State	DIN 3.5
Dark State	Variable Shade 5 ~ 8 / 9 ~ 13
Shade Control	Internal, Digital Display Control
Power On / Off	Manual-on/off, Auto-off
Sensitivity Control	Low~High, Digital Display Control
UV / IR Protection	Up to Shade DIN 16 at all times
Power Supply	Solar cell, Battery replaceable 2 x CR2450 lithium battery
Battery Duration	4000 hours
Switching Time	1/25,000 s. from light to dark
Dark to Light	0.1~1.0 s, Digital Display Control
Low Amperage TIG Rated	≥ 2 amps (AC/DC)
Grinding	Yes
Warranty	2 Year (ADF & Blower Unit) 1 Year (Blower Unit Battery)

FREFLOW RESPIRATOR



HIGH FILTER EFFICIENCY >99.97%

Multi-layer filtration with particle box filtration provides efficiency of up to 99.97%. The TECMEN filtration prevents siphoning in toxic particles, soot and other contaminants for a safe and refreshing breathing experience.

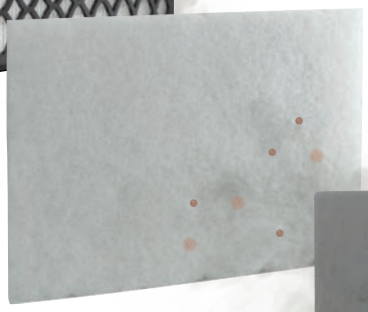
HIGH QUALITY MOTOR

High-quality brushless motor, strong air volume, low power consumption, ultra-quiet running and up to 3 times longer motors life.

- Maximum Air-Flow: 210L/min
- Motor Life Time: over 50000 hours
- Rechargeable Li-ion battery (Spare Part Available)

PARTICLE P3 FILTER

- Industrial Polypropylene Air Filter
- Complex Filters Remove Odours
- Replaceable



PRE-FILTER

- Polypropylene Air Filter Pad
- Superior Chemical Compatibility & Particle Retention Efficiency
- Replaceable



SPARK SCREEN

- Stainless Steel Wire Mesh Screen
- Strong, Durable & Rustproof
- Filter The Air Intake From Large Particles
- Replaceable

INTELLIGENT AIR SUPPLY

Respirator motor automatically adjusts power and air-flow depending on the degree of blockage of the filter box. The intelligent control, provides a stable and clean air flow supply, keeping the users comfortable at all times.



Blower Unit Cover

CLASSIFICATIONS / APPROVALS

Respirator: EN12941, AS/NS1716: 2012 - Freflow V1, Particle filter with class P3 inside

REAL-TIME DISPLAY INDICATOR

Real-time monitoring displays the air-flow, battery power, particulate matter and filter box blockage for the welder. When the filter is blocked beyond sufficient air-supply or the respirator is low, a warning lamp will flicker automatically and the respirator will sound and vibrate. The triple alarm system will alert the welder to ensure complete safety at all times.



RESPIRATOR SPECIFICATIONS	
Airflow Rate	Manufacturer's minimum design flow rate: 165+lpm (5.8+cfm) Low speed: 170+lpm (6+cfm) High speed: 210+lpm (7.4+cfm)
Fast-charging Battery	Rechargeable Li-ion Battery Duration: 9 h low speed, 5-6 h high speed Charge Time: 1 hour
Filter	> 99.97% efficeiency
Relative Humidity	Operating R.H.:< 90%, Storage R.H.: < 85%
Weight	1020g (Blower unit + battery)
Warranty	2 Year (ADF & Blower Unit) 1 Year (Blower Unit Battery)

INCLUSIONS & SPARE PARTS

IEXP TM1000

Part Number:
703090



STANDARD INCLUSIONS

1. Flip Front Auto Darkening Welding Helmet
2. Freflow Blower unit (with waist strap & battery)
3. Spare outside cover lens x 5
4. Spare inside cover lens x 2
5. Side lens x 2
6. Hose with cover
7. Battery Charger
8. Shoulder Strap
9. Airflow Indicator
10. Carry Bag







SPARE PARTS





	Description	Part Number
A1	BT / Tecmen TM1000 Auto Darkening Filter 950S	703097
A2	BT / Tecmen TM1000 Inner Lens 950S (Pkt 5)	703092
	BT / Tecmen TM1000 Inner Lens 930S (Pkt 5)	703102
A3	BT / Tecmen TM1000 Outer Lens (Pkt 5)	703101
A4	BT / Tecmen TM1000 Antifog Grinding Lens (Pkt 5)	703103
A5	BT / Tecmen TM1000 Face Seal	703104
A6	BT / Tecmen TM1000 Sweatband (Pkt 2)	703105
A7	BT / Tecmen TM1000 Softpad (Pkt 2)	703106
A8	BT / Tecmen TM1000 Side Lens Cover (Pkt 2)	703107
A9	BT / Tecmen TM1000 Extended Hood	703114
A10	BT / Tecmen TM1000 Head Gear Assembly	703122
A11	BT / Tecmen TM1000 Helmet Shell with Air Duct	703118
A12	BT / Tecmen Extended Neck Protection Kit	703220
C1	BT / Tecmen FreFlow Respirator and Hose	703317
C2	BT / Tecmen FreFlow Gas Filter	703210
C3	BT / Tecmen FreFlow Particle Filter - P3 V1	703310
C4	BT / Tecmen FreFlow Pre-filter V1 (Pkt 5)	703311
C5	BT / Tecmen FreFlowr Spark Screen V1	703312
C6	BT / Tecmen FreFlow Filter Cover V1	703319
C7	BT / Tecmen FreFlow Standard Battery	703313
C8	BT / Tecmen FreFlow Extended Life Battery	703316
C9	BT / Tecmen FreFlow Battery Charger 240V	703315
C10	BT / Tecmen FreFlow O-Ring Kit	703219
C11	BT / Tecmen FreFlow Buckle	703314
C12	BT / Tecmen FreFlow Shoulder Strap V1	703320
C13	BT / Tecmen FreFlow Backpack	703330

BT BOSSWELD TECHNOLOGY

TECMEN

BT / TECMEN PAPR FREFLOW

Exceptional quality welding helmet and powered air purifying respirator system combination, working together to protect the welder from arc radiation, spatter, dust, pollutants, fine particles as well as other contaminants.

APPLICATIONS

Respirators can be used in many different industrial fields such as polishing, welding and metalworking.

- MIG, TIG & Stick welding
- Plasma Cutting
- Grinding

IEXP TM1000



IMUX TM16





HELMETS

IEXP TM1000



Large viewing area: 107 x 75mm
Highest Optical Class 1 / 1 / 1 / 1
See True Colours with "ReaLens™ Technology"
Digital Display Control with 3 Modes



Easy Lift Up for Grinding &
Shade 5 Lens on Both Sides



Panoramic View
Lightweight Material &
High Impact Resistance Nylon



Adjustable Pivot Headgear
& Face Seal

IMUX TM16



Large viewing area: 97 x 62mm
Highest Optical Class 1 / 1 / 1 / 1
See True Colours with "ReaLens™ Technology"
4 Independent Sensors



External Grind Mode Switch



Lightweight Material &
High Impact Resistance Nylon



Adjustable Pivot Headgear
& Face Seal

CLASSIFICATIONS / APPROVALS

Helmet: DINplus, CE,ANSI Z87.1, CSA Z94.3,
AS/NZS1337.1, 1338.1

1/1/1/1 HIGHEST OPTICAL CLASS

To qualify for a EN379 rating, the auto-darkening lens get tested and rated in 4 categories: Optical class, Diffusion of light class, Variations in luminous transmittance class, and Angle dependence on luminous transmittance class. Each category is rated on a scale of 1 to 3, with 1 being the best (perfect) and 3 the worst.

With no glare or interference, BT TECMEN brings ultra-clear vision to users and helps them to be more concentrated and greatly improve welding efficiency.



Light State



Dark State # 9

HELMET SPECIFICATIONS	IEXP TM1000	IMUX TM16
Auto Darkening Filter (ADF) Model	930 iEXP / 950 iEXP	ADF815SG iMUX
Optical Class	1 / 1 / 1 / 1	1 / 1 / 1 / 1
Viewing Area	107 x 75 mm	97 x 62 mm
Helmet Material	High Impact Resistance Nylon	High Impact Resistance Nylon
Arc Sensor	4	4
Light State	DIN 3.5	DIN 3.5
Dark State	Variable Shade 5 ~ 8 / 9 ~ 13	Variable Shade 5 ~ 8 / 9 ~ 13
Shade Control	Internal, Digital Display Control	Internal, Variable Shade
Power On / Off	Manual-on/off, Auto-off	Automatic On / Off
Sensitivity Control	Low~High, Digital Display Control	Low~High, by infinity dial knob
UV / IR Protection	Up to Shade DIN 16 at all times	Up to Shade DIN 16 at all times
Power Supply	Solar cell, Battery replaceable 2 x CR2450 lithium battery	Solar cell, Battery replaceable 2 x CR2450 lithium battery
Battery Duration	4000 hours	4000 hours
Switching Time	1/25,000 s. from light to dark	1/25,000 s. from light to dark
Dark to Light	0.1~1.0 s, Digital Display Control	0.1 ~ 1.0 s, by infinity dial knob
Low Amperage TIG Rated	≥ 2 amps (AC/DC)	≥ 2 amps (AC/DC)
Grinding	Yes	Yes
Warranty	2 Year (ADF & Blower Unit)	2 Year (ADF & Blower Unit)

FREFLOW RESPIRATOR



HIGH FILTER EFFICIENCY >99.97%

Multi-layer filtration with particle box filtration provides efficiency of up to 99.97%. The TECMEN filtration prevents siphoning in toxic particles, soot and other contaminants for a safe and refreshing breathing experience.

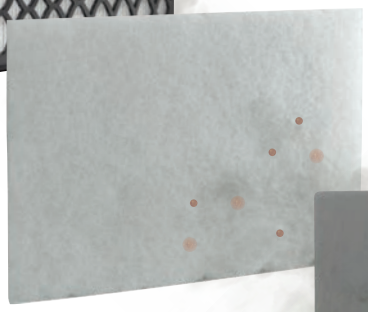
HIGH QUALITY MOTOR

High-quality brushless motor, strong air volume, low power consumption, ultra-quiet running and up to 3 times longer motors life.

- Maximum Air-Flow: 210L/min
- Motor Life Time: over 50000 hours
- Rechargeable Li-ion battery (Spare Part Available)

PARTICLE P3 FILTER

- Industrial Polypropylene Air Filter
- Complex Filters Remove Odours
- Replaceable



PRE-FILTER

- Polypropylene Air Filter Pad
- Superior Chemical Compatibility & Particle Retention Efficiency
- Replaceable



SPARK SCREEN

- Stainless Steel Wire Mesh Screen
- Strong, Durable & Rustproof
- Filter The Air Intake From Large Particles
- Replaceable

INTELLIGENT AIR SUPPLY

Respirator motor automatically adjusts power and air-flow depending on the degree of blockage of the filter box. The intelligent control, provides a stable and clean air flow supply, keeping the users comfortable at all times.



Blower Unit Cover

CLASSIFICATIONS / APPROVALS

Respirator: EN12941, AS/NS1716: 2012 - Freflow V1, Particle filter with class P3 inside

REAL-TIME DISPLAY INDICATOR

Real-time monitoring displays the air-flow, battery power, particulate matter and filter box blockage for the welder. When the filter is blocked beyond sufficient air-supply or the respirator is low, a warning lamp will flicker automatically and the respirator will sound and vibrate. The triple alarm system will alert the welder to ensure complete safety at all times.



RESPIRATOR SPECIFICATIONS	
Airflow Rate	Manufacturer's minimum design flow rate: 165+lpm (5.8+cfm) Low speed: 170+lpm (6+cfm) High speed: 210+lpm (7.4+cfm)
Fast-charging Battery	Rechargeable Li-ion Battery Duration: 9 h low speed, 5-6 h high speed Charge Time: 1 hour
Filter	> 99.97% efficeiency
Relative Humidity	Operating R.H.:< 90%, Storage R.H.: < 85%
Weight	1020g (Blower unit + battery)
Warranty	2 Year (ADF & Blower Unit) 1 Year (Blower Unit Battery)

INCLUSIONS & SPARE PARTS

IEXP TM1000

Part Number:
703090





STANDARD INCLUSIONS

1. Flip Front Auto Darkening Welding Helmet
2. Freflow Blower unit (with waist strap & battery)
3. Spare outside cover lens x 5
4. Spare inside cover lens x 2
5. Side lens x 2
6. Hose with cover
7. Battery Charger
8. Shoulder Strap
9. Airflow Indicator
10. Carry Bag



IMUX TM16

Part Number:
703200





STANDARD INCLUSIONS

1. Auto Darkening Welding Helmet
2. Freflow Blower unit (with waist strap & battery)
3. Spare outside cover lens x 5
4. Spare inside cover lens x 2
5. Hose with cover
6. Battery Charger
7. Shoulder Strap
8. Airflow Indicator
9. Carry Bag



SPARE PARTS







	Description	Part Number
A1	BT / Tecmen TM1000 Auto Darkening Filter 950S	703097
A2	BT / Tecmen TM1000 Inner Lens 950S (Pkt 5)	703092
	BT / Tecmen TM1000 Inner Lens 930S (Pkt 5)	703102
A3	BT / Tecmen TM1000 Outer Lens (Pkt 5)	703101
A4	BT / Tecmen TM1000 Antifog Grinding Lens (Pkt 5)	703103
A5	BT / Tecmen TM1000 Face Seal	703104
A6	BT / Tecmen TM1000 Sweatband (Pkt 2)	703105
A7	BT / Tecmen TM1000 Softpad (Pkt 2)	703106
A8	BT / Tecmen TM1000 Side Lens Cover (Pkt 2)	703107
A9	BT / Tecmen TM1000 Extended Hood	703114
A10	BT / Tecmen TM1000 Head Gear Assembly	703122
A11	BT / Tecmen TM1000 Helmet Shell with Air Duct	703118
A12	BT / Tecmen Extended Neck Protection Kit	703220
B1	BT / Tecmen TM16 Auto Darkening Filter	703207
B2	BT / Tecmen TM16 Outer Lens (Pkt 5)	703201
B3	BT / Tecmen TM16 Inner Lens (Pkt 5)	703202
B4	BT / Tecmen TM16 Sweatband (Pkt 2)	703205
B5	BT / Tecmen TM16 Softpad (Pkt 2)	703206
B6	BT / Tecmen TM16 Face Seal	703204
B7	BT / Tecmen Extended Neck Protection Kit	703220
C1	BT / Tecmen FreFlow Respirator and Hose	703317
C2	BT / Tecmen FreFlow Gas Filter	703210
C3	BT / Tecmen FreFlow Particle Filter - P3 V1	703310
C4	BT / Tecmen FreFlow Pre-filter V1 (Pkt 5)	703311
C5	BT / Tecmen FreFlowr Spark Screen V1	703312
C6	BT / Tecmen FreFlow Filter Cover V1	703319
C7	BT / Tecmen FreFlow Standard Battery	703313
C8	BT / Tecmen FreFlow Extended Life Battery	703316
C9	BT / Tecmen FreFlow Battery Charger 240V	703315
C10	BT / Tecmen FreFlow O-Ring Kit	703219
C11	BT / Tecmen FreFlow Buckle	703314
C12	BT / Tecmen FreFlow Shoulder Strap V1	703320
C13	BT / Tecmen FreFlow Backpack	703330

PAPR FREFLOW FACE SHIELDS

TECMEN

HEAD PROTECTION HIGH IMPACT RESISTANCE

TECMEN powered air purifying face shield has a compact shape and a balanced center of gravity. Used with FreFlow respiratory system, the overall filtration efficiency is as high as 99.997%, it is convenient, comfortable and easy to adjust, providing users with comprehensive protection for respiratory, eye and face and head.

FEATURES

- Eye/face/respiratory protection
- Full Face Clear Lens
- Flip-up Design
- Head Protection
- Bump Cap & Hard Hat Options
- Vibration Dispersal Buffer
- Anti-collision Upgrade
- Comfortable Adjustable Headgear



Multi-point buffer to disperse vibration



Flip-up Design



High Impact Resistant Head Protection (G20-V HARDHAT)



G10 BUMPCAP

P/N: 703410

- Bump Resistance Head Protection



G20-V HARDHAT

P/N: 703420

- High Impact Resistant Head Protection

FACE SHIELD SPECIFICATIONS

Model	G10 Bumpcap	G20-V Hardhat
Weight	660g	792g
Head Protection Approval	EN812:2012	EN397:2012 AS/NZS 1801
Eye & Face Approval	EN166:2001	AS/NZS 1337.1

APPLICATIONS

- Metallurgy / Grinding
- Shipbuilding
- Rail Transit
- Manufacturing
- Construction
- Chemical Industry
- Laboratory Work
- Nucler Power
- Healthcare
- Hazardous Chemical Production

FACE PROTECTION FROM SPARKS & SPLASH

Optical grade PC lens bring high-resolution clear vision. High intensity lens provide protection against UV/IR, particle spatter, liquid spatter, metal melt, hot solid spatter to secure safety. Used with FreFlow respiratory system, the overall filtration efficiency is as high as 99.97%, providing users with comprehensive protection for respiratory, eye and face.



TM-S1

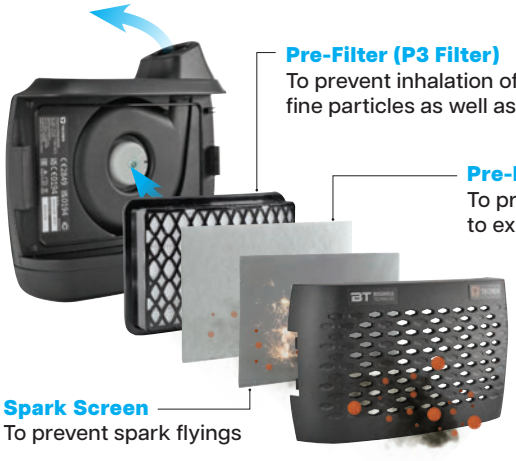
P/N: 703430

- Eye/face/respiratory protection
- Full Face Clear Lens
- Curved 3D Features
- High Impact Resistant
- Lightweight

FACE SHIELD SPECIFICATIONS

Model	TM-S1
Weight	130g
Eye & Face Approval	EN166:2001

FREFLOW™ POWERED AIR-PURIFYING RESPIRATOR FILTER SCHEMATIC



Pre-Filter (P3 Filter)
To prevent inhalation of dust, pollutants, fine particles as well as other contaminants

Pre-Filter
To prevent large diameter particles, to extend the lifetime of P3 filter

Spark Screen
To prevent spark flyings

HIGH FILTER EFFICIENCY
> 99.97%

RESPIRATOR SPECIFICATIONS

Airflow Rate	Manufacturer's minimum design flow rate: 165+lpm (5.8+cfm) Low speed: 170+lpm (6+cfm) High speed: 210+lpm (7.4+cfm)
Fast-charging Battery	Rechargeable Li-ion Battery Duration: 9 h low speed, 5-6 h high speed Charge Time: 1 hour
Filter	> 99.97% efficeiency
Relative Humidity	Operating R.H.:< 90%, Storage R.H.: < 85%
Weight	1020g (Blower unit + battery)
Warranty	2 Year (Blower Unit) 1 Year (Blower Unit Battery)
Approval	EN 12941 P R SL, AS/NZS 1716

PAPR FREFLOW FACE SHIELDS

TECMEN

STANDARD INCLUSIONS



G10 BUMPCAP
P/N: 703410
- Bumcap Face Shield
- FreFlow Blower Unit (with waist strap & battery)
- Spare Disposable Protective Film (pkt 10)
- Hose with cover
- Battery Charger
- Shoulder Strap
- Airflow Indicator
- Duffle Bag



G20-V HARDHAT
P/N: 703420
- Hardhat Face Shield
- FreFlow Blower Unit (with waist strap & battery)
- Spare Disposable Protective Film (pkt 10)
- Hose with cover
- Battery Charger
- Shoulder Strap
- Airflow Indicator
- Duffle Bag



TM-S1
P/N: 703430
- TM-S1 Face Shield
- FreFlow Blower Unit (with waist strap & battery)
- Hose with cover
- Battery Charger
- Shoulder Strap
- Airflow Indicator
- Duffle Bag

SPARE PARTS



	DESCRIPTION	P/N
1	Tecmen Headgear for G10 (G-100)	703411
2	Tecmen Ribbon for G10 (G-104)	703412
3	Tecmen Headgear for G20-V (G-110)	703421
4	Tecmen Ribbon for G20-V (G-114)	703422
5	Tecmen Quick-connection Hose for G20-V (V1HO-TM3-01)	703423
6	Tecmen Hose (Including O-Ring) (V1HO-TM3-00)	703318
7	Tecmen Forehead Seal for G10 and G20-V (G-101)	703471
8	Tecmen Comfort Back Pad for G10 and G20-V (G-103)	703472
9	Tecmen Standard Face Seal for G10 and G20-V (G-200)	703473
10	Tecmen Headtop Buttons for G10 and G20-V (G-301)	703474
11	Tecmen Visor Frame Assembly for G10 and G20-V (G-302)	703475
12	Tecmen Visor Frame Buttons for G10 and G20-V (G-303)	703476
13	Tecmen Chin Strap for G10 and G20-V (G-105)	703478
14	Tecmen Protective Visor for G10 and G20-V (G-400)	703477
15	Tecmen Disposable Protective Film for Visor for G10 and G20-V (G-401) (Pkt 10)	703479
16	Tecmen Disposable Protective Film for Visor for TM-S1 (PF TM S 00) (Pkt 10)	703432
17	Tecmen Replacement Lens for TM-S1 (S1LENSAS)	703431
18	BT/Tecmen FreFlow Respirator and Hose	703317
19	BT/Tecmen FreFlow Gas Filter	703210
20	BT/Tecmen FreFlow Particle Filter - P3 V1	703310
21	BT/Tecmen FreFlow Pre-filter V1 (Pkt 5)	703311
22	BT/Tecmen FreFlow Spark Screen V1	703312
23	BT/Tecmen FreFlow Filter Cover V1	703319
24	BT/Tecmen FreFlow Standard Battery	703313
25	BT/Tecmen FreFlow Extended Life Battery	703316
26	BT/Tecmen FreFlow Battery Charger 240V	703315
27	BT/Tecmen FreFlow O-Ring Kit	703219
28	BT/Tecmen FreFlow Buckle	703314
29	BT/Tecmen FreFlow Shoulder Strap V1	703320
30	BT/Tecmen FreFlow Backpack	703330

100LW LASER WELDING HELMET

SUPERIOR LASER PROTECTION
HIGH REFLECTIVE DUR-ALUMINIUM SHIELD



The best value and the most safe laser welding helmet on the market, with comfortable padded head gear and fully meeting (EU) 2016/425, EN ISO 16321-1:2022, EN ISO 16321-2:2021 and the stringent EN207 laser eyewear standard up to 3kW laser power. Suits also laser cleaning, which requires auto dimming.

The 100LW Laser welding helmet is specifically designed for laser welding/cutting application to protect users. The variable shade 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/bluelight.



LASER PROTECTION: 1000-1100 D LB8+ IR LB8

OPTICAL DENSITY(OD): OD 8+ @1000-1100nm
OD 10+@1064nm

- High speed reactive auto darkening face screen
- Shade level 4 – 12
- Protection level 4 – 12
- Welding Mode & Grinding mode

FEATURES

- **DUR-ALUMINIUM SHIELD:** more laser resistance than normal laser helmets
- **EFFECTIVE LASER PROTECTION:** Designed to meet EN207 OD10+@1064nm, the 100LW provides full protection to prevent eye burns, retinal damage and other tissue damage.
- **ADVANCED HEADGEAR DESIGN:** Viewing angle and distance adjustable. Offers a better weight distribution for maximum comfortable feelings.
- **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.

APPLICATIONS

Laser welding helmets are essential in various industries where laser welding is employed:

- **AUTOMOTIVE**: Welding of precision components, such as engine blocks, transmission housings, and body panels.
- **AEROSPACE**: Welding of lightweight, high-strength materials used in aircraft and spacecraft construction.
- **ELECTRONICS**: Welding of delicate electronic components, such as circuit boards and connectors.
- **MEDICAL DEVICE MANUFACTURING**: Welding of precision components for medical devices, such as implants and surgical instruments.

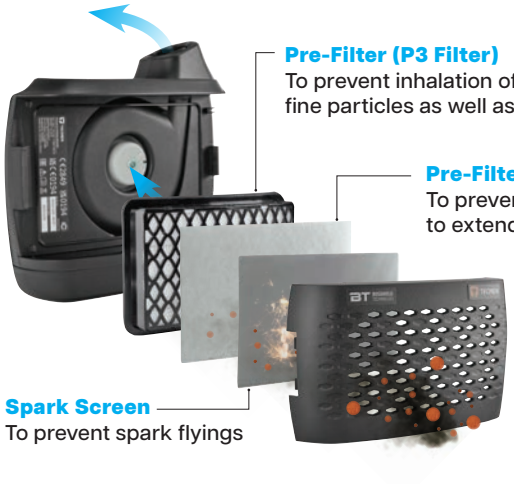
100LW HELMET SPECIFICATIONS

ADF MODEL	100LW
Viewing Area	96 x 46.5mm
Optical Class	1 / 1 / 1 / 2
Number of Sensors	2
Power On/Off	Automatic On/Off
Dark State	4 – 8 / 8 – 12
Light State	Shade 2.0
Switching Speed	1/25,000s, from Light to Dark
Special Modes	GRIND / CUT / MIX / DARK
Sensitivity Control	Low-High, LED and Button Control
Delay	0.1 – 1.0s, LED and Button Control
UV/IR Protection	Up to Shade DIN 16 at all times
Helmet Material	High Impact Resistant Nylon
Laser Protection	1000-1100 D LB7+ IR LB8
Optical Density(OD)	OD 8+@1000-1100nm, OD 10+@1064nm
Approvals	CE (EN 207, EN ISO 16321)
Weight	613 gram
Part Number	**703500**

100LW LASER PAPR

TECMEN

FREFLOW™ POWERED AIR-PURIFYING RESPIRATOR FILTER SCHEMATIC



Pre-Filter (P3 Filter)
To prevent inhalation of dust, pollutants, fine particles as well as other contaminants

Pre-Filter
To prevent large diameter particles, to extend the lifetime of P3 filter

Spark Screen
To prevent spark flyings

HIGH FILTER EFFICIENCY
> 99.97%

RESPIRATOR SPECIFICATIONS

Airflow Rate	Manufacturer's minimum design flow rate: 165+lpm (5.8+cfm) Low speed: 170+lpm (6+cfm) High speed: 210+lpm (7.4+cfm)
Fast-charging Battery	Rechargeable Li-ion Battery Duration: 9 h low speed, 5-6 h high speed Charge Time: 1 hour
Filter	> 99.97% efficeiency
Relative Humidity	Operating R.H.:< 90%, Storage R.H.: < 85%
Weight	1020g (Blower unit + battery)
Warranty	2 Year (Blower Unit) 1 Year (Blower Unit Battery)
Approval	EN 12941 P R SL, AS/NZS 1716

STANDARD INCLUSIONS



STANDARD INCLUSIONS
P/N: 703500

- 100LW Laser Welding Helmet
- Outside Lens Cover (pkt 5)
- Inner Cover Lens (pkt 2)
- FreFlow Blower Unit (with waist strap & battery)
- Spare Disposable Protective Film (pkt 10)
- Hose with cover
- Battery Charger
- Shoulder Strap
- Airflow Indicator
- Duffle Bag



SPARE PARTS



	DESCRIPTION	P/N
1	Tecmen 100LW Outside Lens Cover (pkt 5)	703551
2	Tecmen 100LW Inner Cover Lens (pkt 5)	703552
3	Tecmen 100LW Sweatband SWTM025	703555
4	Tecmen 100LW Auto Darkening Filter ADF100LW	703557
5	Tecmen 100LW Headgear HG202310	703558
6	BT/Tecmen FreFlow Respirator and Hose	703317
7	BT/Tecmen FreFlow Gas Filter	703210
8	BT/Tecmen FreFlow Particle Filter - P3 V1	703310
9	BT/Tecmen FreFlow Pre-filter V1 (Pkt 5)	703311
10	BT/Tecmen FreFlow Spark Screen V1	703312
11	BT/Tecmen FreFlow Filter Cover V1	703319
12	BT/Tecmen FreFlow Standard Battery	703313
13	BT/Tecmen FreFlow Extended Life Battery	703316
14	BT/Tecmen FreFlow Battery Charger 240V	703315
15	BT/Tecmen FreFlow O-Ring Kit	703219
16	BT/Tecmen FreFlow Buckle	703314
17	BT/Tecmen FreFlow Shoulder Strap V1	703320
18	BT/Tecmen FreFlow Backpack	703330