

## 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.

## 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.



Power On/ Off & Airflow Switch

Filter Warning

Airflow

Battery Indicator



Blower Unit Cover

## RESPIRATOR SPECIFICATIONS

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

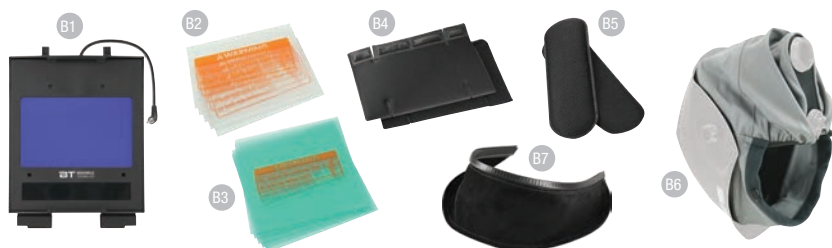


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## SPARE PARTS



	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 FreFlow 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