

AIMWELL AYO WX-FFM AROUND-NECK FULL FACE MASK PAPR SYSTEMS



PRACTICAL AND FLEXIBLE

Innovation at heart

Powered respirators don't have to be bulky and heavy to provide good protection.

Aimwell, who specialized in respirator design and manufacture, had this belief on day one. Understanding the pain points of the popular powered respirator style comprising a Headtop, a long hose, and a heavy belt-mounted power module with many mining and construction workers, we invented the Around-neck modular PAPR series AYO WX.

Expertise and Strength

With a background in ResMed medical respiratory product design and manufacture, Aimwell has exceptional ability in miniaturization, advanced sensorless BLDC motor and control algorithm for our blowers, and a proprietary motor and respirator manufacturing know-how and capability. This results in our products' world-class performance and quality while being exceptional value for money.

Practical and Flexible Solutions

Our around-neck products can only be possible with our world-leading breath-responsive flow control technology and the innovative modular design, which evenly distributes the respirators around the neck. As a result, our products are highly mobile, with no hose, no belt, and no integrated headtop, but are compatible with most related PPEs, such as hardhats, goggles, and earmuffs, making them versatile in much wider applications, especially works that require high exertion and in confined spaces.

Our Mission

We strive to help workers breathe safer and better through continuous innovation in product design and manufacturing while providing uncompromising customer service.

Aimwell AYO WX-FFM Around-neck Full Face Mask PAPR P3 Systems

Introducing a highly practical and flexible series of Full Face Mask Powered Respirator Systems:

- AYO WX-FFM_LF Loose-fitting Full Face Mask PAPR Systems
- AYO WX-FFM_DS Double-seal Tight-fitting Full Face Mask PAPR Systems.

Key common features:

- Provide breathing, face, and eye protection.
- The highest class PAPR P3 breathing protection > 2000 protection factor
- Exceptional transparent lens with a magnificent field of view.
- Tough anti-scratch coating.
- World-leading breath-responsive flow control technology – effective and comfortable.
- Strong airflow over 200 L/min (particulate) - support for strenuous work.
- Superb fit factor over 2000 with WX FFM_DS double-seal FFM mask (clean-shaven).
- Innovative Loose-fitting kit – beard compatible and no need for fit testing.
- Patented Around-neck innovation – no hose, no belt, no hassles.
- Patented Push-fit & Twist-release connector for fast and easy connection.
- Low profile, lightweight, and well-balanced support.
- One size fits 95% of male and 65% of female workers.
- Industry-leading speech-enhanced full-face mask.
- Low flow alarm, low battery alarm, and flow capacity check.
- Long battery life up to 16 hours and battery replaceable.
- Modular design for great flexibility and parts sharing.
- Interchangeable between Loose-fitting WX FFM_LF and Double-seal tight-fitting WX FFM_DS full-face masks.
- Easy to select and replace required modules.
- Very easy to clean and maintain.
- Compatible with most related PPEs, such as hard hats and earmuffs.



Applications: Face, Eyes, and Respiratory Protection of hazardous dusts, fumes and gases in:

Mining

Construction

Manufacturing

Farming

Recycling

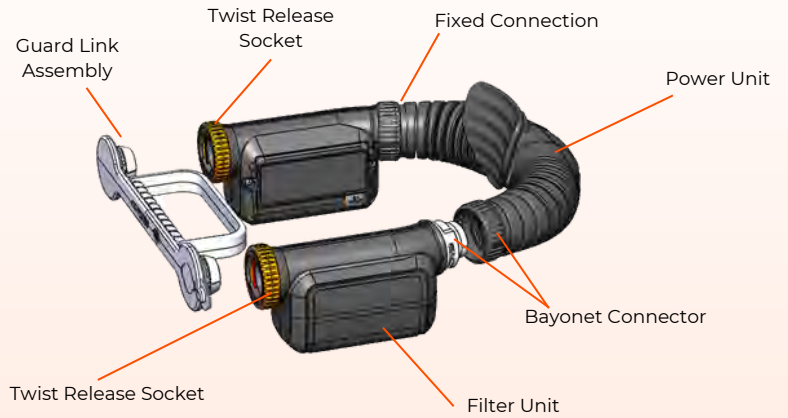
Aimwell AYO WX-FFM systems provide a better alternative to traditional face shield PAPRs with hoses and bulky belt-mounted power units for work requiring frequent body movement and exertion, or in confined spaces, enjoying increased productivity at a fraction of the cost.

Aimwell AYO WX-FFM PAPR Systems Overview

PATENTED STRUCTURE: Push-fit & Twist-release Connection connects Full-face Assembly and Main Unit



- 1. Front Module Assembly
- 2. Inner Mask Assembly
- 3. Lens & Cushion Assembly
- 4. Head Strap Assembly
- 5. Fit Adjust Toggles
- 6. Push-Fit Plug



AYO WX FFM Full Face Mask Assemblies

<p>WX FFM_LF M/L Item no. AP134</p>	<p>WX FFM_DS M/L Item no. AP096</p>

AYO WX PAPR P3 Main Unit

<p>Particulate Standard Item no. AP035</p>	<p>Particulate Boost Item no. AP102</p>	<p>Gas Item no. AP104</p>

Steps to Select and Configure Your System

1. Select the System type: WX-FFM_LF, or WX-FFM_DS.
2. Select a filter: particulate-only or gas/combined filter.
3. Select a Power Unit: Particular Standard, Particulate Boost, or Gas.

Note: *WX FFM comes in M/L size only.*

Introducing AYO WX-FFM_LF Loose-fitting Full Face Mask Powered Respirator System

AYO WX-FFM_LF – a loose-fitting full-face mask PAPR series within AYO WX around-neck modular PAPR systems, comprising 3 models:

- AYO WX-FFM_LF PAPR System – Particulate Standard
- AYO WX-FFM_LF PAPR System – Particulate Boost
- AYO WX-FFM_LF PAPR System – GAS

With the highest class PAPR P3 breathing protection, this series is designed for workers with beards without fit testing. They are suitable for light to moderate workloads in a wide range of protection, such as asbestos, silica dust, metalliferous dust, powder coating, coal dust, sawdust, and toxic gas protection, as well as face and eye protection.

This state-of-the-art and patented powered full-face mask series represents the best PAPR technology in the world, and they are a better alternative to traditional face shield PAPRs with hoses and bulky belt-mounted power units for applications requiring frequent body movement and exertions or in confined spaces.



Low Profile and Secure Mask Assembly

- The exceptionally clear full-face mask is lightweight just around 450g.
- While compatible with most beards, the loose-fitting silicone full-face seal provides a better seal than traditional elastic fabric or neoprene seal.
- Pleasant airflow across the face feeling cooler in hot conditions.
- Easily replaceable Loose-fitting elastic face seal complements the silicone full-face seal, further reduces leaks from beards, and prevents dust from accumulating within beards.
- Suitable for most light to moderate exertion work or applications requiring a minimum protection factor of 500 (TH3) without fit testing.
- Innovative built-in speech-enhanced exhalation valve provides low exhalation resistance for comfort and better speech clarity over many other full-face masks on the market.
- The face shield has two air arms connected with the Main Unit located around the neck.
- The head harness has a unique clamping band for well-balanced support of the Main Unit.

World-leading Breath-responsive Flow Control

- Generates over 200 L/min peak flow during each hard inhalation, great for high-exertion work.
- Reduce flow while maintaining positive pressure during each exhalation to save battery energy and lower the motor noise.
- Fast breath response to maintain positive pressure during hard breathing thanks to Aimwell's proprietary low inertia blower and advanced control algorithm.
- Up to 16 hours of battery run time per full charge.

System Name	Item Code
AYO WX-FFM_LF PAPR System - Particulate Standard	AP128
AYO WX-FFM_LF PAPR System - Particulate Boost	AP129
AYO WX-FFM_LF PAPR System - Gas	AP130



Patented Around-neck Main Unit Structure

- An easily detachable and selectable Filter Unit located on the left side of the face with one end linking to the mask and the other end linking to the Power Unit.
- A selectable Power Unit having a flexible and soft tube-like blower section at the back of the neck for great comfort and a streamlined battery-installed control section at the right side of the face linking to the mask.
- A Guard Link protects the Main unit when not in use or during clearing. It also facilitates Flow Capacity Testing.
- Patented Push-fit & Twist-release connection allows quick connection and disconnection with the mask assembly.
- Battery is replaceable.
- Weight just under 550g (with a particulate filter and battery)

Easy yet Sophisticated Controls

- An On/off button to wake up the unit from Sleep mode.
- 3 LEDs for Battery charge or Flow Capacity indication.
- Filter blocked audible and LED alarms.
- Low battery audible alarm.
- ECO and BOOST mode selection (BOOST model only).
- Auto breath detection – no need to press any buttons after waking up the unit, air flow will be generated automatically soon after your first breath; no need to press any buttons after mask-off, the blower will stop automatically a few seconds after that.
- A Test button to perform a Flow Capacity health check when the Guard Link is connected and properly set.
- Onboard battery charging control with fast blinking LED indicating over 95% charge with recharging time within 3.5 hours.
- Auto turn-off to Sleep mode after in Idle for 10 minutes or pressure the On/Off button for 5 seconds.

Options for Power Units

- Particulate Standard Power Unit: the low-cost entry-level option with ECO mode only, suitable for most light to moderate exertion work.
- Particulate Boost Power Unit: the higher flow option with ECO mode and BOOST mode selectable, with BOOST mode generates about twice about of air of the ECO mode, suitable for most heavy exertion work.
- GAS Power Unit: optimised for working with WX gas filter, where the air flow is controlled not overly consuming the gas cartridge but at the same time still being able to produce over 170 L/min flow.



Filter Options and Replacement

- Particulate Filter Unit: contains a P3 Main Filter and pleated pre-filters. The low-cost pre-filters protect the Main Filter from clogging by larger than 5µm particles thus making the running cost low.
- Gas Filter Unit: contains a gas cartridge A1B1E1K1 and a P3 HEPA filter to form a combined filter.
- The particulate filters can be replaced by hand: the prefilter can be replaced immediately when the Sliding Door is removed; By opening the cases, the Main Filter can be replaced.
- The combined filters can be replaced by releasing the sliding button and opening the cases.


Easy and Low Maintenance

- Mask assembly can be flush washed with tap water for a quick cleaning or immersed in water with a cleaning solution for a thorough cleaning.
- The Bellow part of the Main Unit can be flush washed when the Guard Link is connected. All plastic casings can be wiped clean using a damp cloth.
- Lubricate the Push-fit plugs of the mask monthly with a thin layer of Vaseline or silicone lubricant.
- Aimwell brushless DC motor can run over 10 years maintenance-free.

Filter Unit

	Item Code	Item Name
	AP034	AYO WX PAPR P3 Particulate Filter Unit
	AP120	AYO WX PAPR P3 Combined Filter Unit (A1B1E1K1P3)



Power Units

	Item Code	Item Name
	AP033	AYO WX PAPR P3 Power Unit – Particulate Standard
	AP101	AYO WX PAPR P3 Power Unit – Particulate Boost
	AP103	AYO WX PAPR P3 Power Unit – Gas

Main Filters

	Item Code	Item Name
	AP036	AYO WX PAPR P3 Main Filter - Standard (Pack of 3)
	AP047	AYO WX PAPR P3 Main Filter - Long Life (Pack of 3)
	AP121	AYO WX Gas Cartridge – A1B1E1K1
	AP123	AYO WX PAPR HEPA Filter For Gas

Pre Filters

	Item Code	Item Name
	AP028	AYO WX Pleated Pre-Filter (Pack of 10)
	AP049	AYO WX Anti-odour Pre-filter (Pack of 10)

Introducing AYO WX-FFM_DS Full Face Mask Powered Respirator Systems

AYO WX-FFM_DS – a double-seal tight-fitting full-face mask PAPR series within AYO WX around-neck modular PAPR systems, comprising 3 models:

- AYO WX-FFM_DS PAPR System – Particulate Standard
- AYO WX-FFM_DS PAPR System – Particulate Boost
- AYO WX-FFM_DS PAPR System – GAS



System Name	Item Code
AYO WX-FFM_DS PAPR System - Particulate Standard	AP117
AYO WX-FFM_DS PAPR System - Particulate Boost	AP118
AYO WX-FFM_DS PAPR System - Gas	AP119

AYO WX-FFM_DS system is essentially built upon the WX-FFM_LF system, here are the similarities, differences, and additional features:

- The Main Unit and its options are identical to the WX-FFM_LF system.
- The face shield has the same structure as FFM_LF except it also contains a novel inner mask assembly that provides an independent breathing seal, and the loose-fitting kit is removed.
- Combining the silicone full-face seal, an innovative double-seal mask is created, it works as a tight-fitting mask and achieves better protection than traditional tight-fitting full-face mask PAPRs with only one independent seal; and it also provides a higher level of protection than most loose-fitting PAPRs, especially when negative pressure occurs during peak heavy breathing moments.
- Suitable for most light to high-exertion work or applications requiring a minimum protection factor of 2000 (P3/TM3) with fit testing.

Featured Accessories

	Item Code	Item Name
IMAGE NOT YET AVAILABLE	API32	FFM_LF Changeover Kit
	AP133	Inner Mask Assembly
	API24	FFM Loose-fitting Kit
	API26	FFM Loose-fitting Face Seal (pack of 3)
IMAGE NOT YET AVAILABLE	AP100	Lens protective peel-off (pack of 10)
	AP037	Removeable Li-ion Polymer Battery Pack
	AP041	AYO WX Fit Testing Adaptor

Technical Specifications:

<p>Compliance</p>  <p>CMI ProdCert PC10112 AS/NZS 1716:2012</p>	Respiratory Protection	AS/NZS 1716:2012 PAPR-P3
	EMC	<ul style="list-style-type: none"> • CISPR 11: 2017+A1:2020 • EN IEC 61326-1:2021 • EN IEC 61326-2-2:2021 • EN IEC 61000-3-2:2019/A1:2021 • EN 61000-3-3:2013/A2:2021 • 47 CFR FCC part 15, Subpart B • ANSI C63.4:2014
	Safety	AS/NZS 61558, EN 61558, UL 62368
	CMI ProdCert	AS/NZS 1716:2012 Lic: PC10112
Operation Conditions	Altitude	-1000m to 1000m
	Temperature	-10°C to 45°C (14°F to 113°F)
	Humidity	Up to 95% (non-condensing)
Battery Run Time	Particulate	Typically, 8 - 16 hours depending on the actual workload and dust concentration.
Peak Flow	Particulate	Above 200 l/min
	Gas	Above 170 l/min
Manufacturer Minimum Flow Condition		120 l/min
Weight (Power Unit)		Under 550g (particulate filter)
AC Charge Adaptor	Input	100 ~ 240VAC, 47~60 Hz
	Output	13.8VDC, 1A
	DC Jack plug	1.1mm pin, 3.0mm barrel
Battery Charging Conditions	Charge Temperature	0°C - 35°C
	Charge Time	3.5 hours = 95% charge 4.0 hours = 100% charge



Where to Buy



Scan the QR to visit Aimwell Online Shop -
<https://aimwellbreathing.com/shop-industrial-respirator/>

Authorised Distributor

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- o WeldQuip Group

Training and Support

Aimwell Online Training Videos, FAQs

CONTACT US

📍 Suite 205, 56 Delhi Road,
Macquarie Park NSW 2113

✉ info@aimwellbreathing.com

☎ (02) 7251 8689

☎ (02) 7229 4732