

POWERED AIR PURIFYING RESPIRATOR (PAPR) COMPLETE KIT

PRODUCT CODE: PRK-G5ATX-1

The Vanguard G5 EX PAPR is the next evolution in powered air respiratory protection, designed for use in potentially explosive atmospheres. With ATEX and IECEx certification, enhanced durability, and extended operational capability, the G5 EX provides reliable respiratory protection for demanding industrial environments.



AUSTRALIAN/
NEW ZEALAND
STANDARD
AS/NZS 1716:2012
SMK41729



FEATURES

- » **ATEX / IECEx Certified:** Suitable for use in potentially explosive atmospheres (Groups I, II, III), including mining, oil & gas environments.
- » **Smart Display:** Displays real-time information, including battery level, filter loading status, and airflow settings, for easy monitoring.
- » **Three Airflow Rates:** 170/190/210 L/min to suit task requirements and user comfort.
- » **Consistent Airflow Performance:** Pre-calibrated system maintains stable airflow, compensating for environmental conditions.
- » **Integrated Alarm System:** Audible, visual, and vibration alerts for low airflow, low battery, and filter status.
- » **Extended Runtime:** Up to 11 hours at 170 L/min.
- » **High-Capacity Intrinsically Safe Battery (6400 mAh):** Designed for safe operation in hazardous environments with secure fitment to the blower. The battery charges in approximately 2.5 hours and features a battery-status indicator.
- » **Durable Blower Design:** Robust construction with enhanced sealing for demanding industrial use.
- » **Ergonomic Headtop:** Lightweight and balanced for extended wear comfort with clear, wide field of vision.
- » **Visor:** High impact visor with excellent peripheral view.
- » **Advanced Filtration Compatibility:** Supports P3 particulate and combined gas filters (A1B1E1K1P3, A2P3).
- » **IP65-rated:** Dust-tight and protected against water ingress when fitted with decon plugs.

KIT CONTAINS

- » Headtop (PRP-G5A-HTC)
- » Quick-Release Hose with Cover (PRP-G5A-QRBT1)
- » Blower Unit (PRP-G5ATX-BLO)
- » Intrinsically Safe Battery 6400 mAh (PRP-G5A-BATI) and Battery Attachment Tool (PRP-G5A-BATAT)
- » Single Battery Charger (PRP-G5A-SCHGRAU)
- » Particulate Filter P3 (PRF-G5A-P3)
- » Pre-Filter (PRF-G5ATX-PF)
- » Flow Meter (PRP-G4G5A-AFI)
- » Shoulder Strap (PRP-G5A-SS)
- » Standard Belt Assembly (PRP-G5A-SBLT)
- » Tear Off Visor Film – 10 Pack (PRP-G4-TOVF)
- » Decon Cleaning Plug Kit (PRF-G5ATX-DECON)
- » Carry/Storage Bag

APPLICATIONS

- » Potentially Explosive Environments
- » Mining
- » Oil & Gas
- » Industrial Processing
- » Construction
- » Chemical Handling
- » Agriculture
- » Refineries



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SPECIFICATIONS

BLOWER		
Airflow Rate	Low speed: 170+ lpm	
	Medium speed: 190+ lpm	
	High speed: 210+ lpm	
Filtration Efficiency	99.997%	
Alarm	Audible, Visual, Vibration	
Battery 6400mAh rechargeable lithium-ion battery	Charging time: 2.5h	
	Battery lifespan*: ≥ 500 charge cycles	
	Battery runtime*: (from fully charged with new particle filter)	11h (170+ lpm) 9h (190+ lpm) 7h (210+ lpm)
Filters	P3 / A2P3 / A1B1E1K1P3 / Pre-Filter	
Intrinsic Safety	Mining susceptible to firedamp (Group I)	Ex ib I Mb
	Non-Mining gas atmospheres (Group II)	Ex ib IIC T4 Gb, Zone 1
	Non-Mining dust atmospheres (Group III)	Ex ib IIIB T135°C Db, Zone 21
Ingress Protection	IP65 ^Δ . Supports shower decontamination when fully assembled or used with inlet and outlet plugs	
Operating Altitude	-500 to 5000m	
Operating Conditions	-20°C to 55°C (-4°F to 131°F), < 90% (R.H.)	
Storage Conditions	-20°C to 55°C (-4°F to 131°F), < 85% (R.H.)	
Filter Shelf Life	5 years from the date of manufacture when stored correctly	
Weight	Blower: 1500g Standard Waist Belt: 300g	



99.997%
FILTER
EFFICIENCY

HEADTOP	
Viewing Area	426 cm ²
Operating Temperature	-10°C to 55°C (14°F to 131°F)
Storage Temperature	-30°C to 50°C (-22°F to 122°F)
Weight	890g

*Battery runtime may vary depending on filter load, particle concentration, gas and vapour exposure, environment, and working intensity. **Batteries are designed to retain 80% of their original capacity after 550 complete charge cycles, under ideal conditions. This means that after a certain number of charge cycles, the battery's ability to hold a full charge and deliver peak performance may diminish.
^ΔMeets IP Rating IP54 (5=dust protected, 4=sprayed water from all directions) when using filter cover. IP65 when fitted with cleaning plugs (6=dust tight, 5=water jets from all directions).

STANDARDS & CERTIFICATIONS

BLOWER	
AS/NZS	AS/NZS 1716:2012 Respiratory Protective Devices
	EN12941:1998+A2:2008-Respiratory protective devices-Powered filtering devices incorporating a helmet or hood
ATEX	EN 60079-0:2012-Explosive atmospheres, Equipment General Requirements EN 60079-11:2012-Explosive atmospheres, Equipment protection by intrinsic safety"i"
IECEx	IEC 60079-0:2017-Explosive atmospheres-Part 0: Equipment-General requirements
INGRESS PROTECTION	IEC 60529:1989+A1:1999+A2:2013-Degrees of protection provided by enclosures (IP Code)
HEADTOP	
AS/NZS	AS/NZS 1801:2024 Type 1 Industrial Safety Helmet AS/NZS 13371:2010 High Impact Eye/Face Protection
EN	EN ISO 16321-1:2022, EN 397:2012+A1:2012
BATTERY	
CE	Compliant with IEC/EN 62133 under the new battery safety regulation (EU) 2023/1542. Compliant with IEC/EN61000 under the EMC Directive 2014/30/EU
RoHS	IEC/EN 62321 under the RoHS Directive 2011/65/EU and Delegated Directive (EU) 2015/863



TECHNICAL PROPERTIES

EX MARKING

Mining susceptible to firedamp (Group I)

- » IM2; Category M2, Ex ib I Mb
- » ib – intrinsic safety for equipment protection level Mb

Non-Mining Gas atmospheres (Group II)

- » II2 G; Zone 1, Ex ib IIC T4 Gb
- » ib – intrinsic safety for equipment protection level Gb
- » IIC – Gas apparatus group
- » T4 – Classification of maximum surface temperatures for Group II

Non-Mining Dust atmospheres (Group III)

- » II 2 D; Zone 21, Ex ib IIIB T135°C Db
- » ib – intrinsic safety for equipment protection level Db
- » IIIB – Dust apparatus group
- » T135°C – maximum surface temperatures for Group III

IMPORTANT NOTICE

The Vanguard G5 EX is designed for use by trained and competent personnel only. The user is responsible for ensuring the product is suitable for the intended application and workplace environment.

All technical information provided relates only to the Vanguard G5 EX and applies under the stated conditions. Use outside of these instructions may reduce the level of protection provided and is undertaken at the user's own risk.

Compliance with this document does not remove the responsibility to follow all applicable laws, regulations, and workplace safety requirements.

Warranty conditions are subject to the terms stated in the instruction manual. No other warranties or compensation apply unless otherwise specified.

CLEANING

- » Do not clean the blower if the battery is damaged.
- » Clean with neutral detergent solution. Make sure the contact parts are clean and dry before storage and use.
- » Do not clean filters by tapping, knocking or blowing air through them. Replace filters when dirty, wet, damaged, clogged or at the end of their service life.
- » Do not immerse the blower assembly or battery in liquid.
- » Do not wipe the plugs.
- » Clean the breathing tube connections with clean water and a neutral detergent (pH 6-8).

LIMITATIONS

The Vanguard G5 EX shall not be used under the following conditions:

- » In atmospheres containing less than 17% oxygen;
- » In areas with insufficient ventilation;
- » In environments classified as Immediately Dangerous to Life or Health (IDLH);
- » In explosive or hazardous locations when charging, replacing, or handling the battery;
- » If the product has been modified, altered, or improperly repaired.

Only the original charger shall be used to charge the battery pack. The product shall not be disassembled or the battery charged or replaced in hazardous locations.

PARTS AND ACCESSORIES FOR USE WITH THE VANGUARD G5 EX PAPR

AVAILABLE SEPARATELY

CODE	DESCRIPTION	UNIT	CARTON
KIT & COMPONENTS			
PRK-G5ATX-1	Vanguard G5 EX PAPR Complete Kit (Headtop, Quick-Connection Hose, Blower, Intrinsically Safe 6400 mAh Battery and Battery Attachment Tool, Single Battery Charger Kit, Particle Filter (P3), Pre-Filter, Flow Meter, Shoulder Strap, Standard Belt, Tear Off Visor Film, Decon Cleaning Plug Kit & Carry/Storage Bag)	1	4
PRP-G5A-HTC	Headtop Only	1	4
PRP-G5ATX-BLO	Blower Complete (Blower, Intrinsically Safe 6400 mAh Battery and Battery Attachment Tool, Standard Belt, Single Battery Charger Kit & Flow Meter)	1	4
FILTERS			
PRF-G5A-P3	Particle Filter (P3)	1	40
PRF-G5A-ABEK1P3	Combined Filter (A1B1E1K1P3)	1	40
PRF-G5A-A2P3	Combined Filter (A2P3)	1	40
PRF-G5ATX-PF	Pre-Filter (5 pack)	5	40
PRP-G5A-FTC	Filter Cover	1	30
BATTERIES & CHARGER			
PRP-G5A-BATI	Intrinsically Safe 6400 mAh Battery	1	10
PRP-G5A-SCHGRAU	Single Battery Charger Kit (AU, NZ, CN)	1	40
PRP-G5A-BATAT	Battery Attachment Tool	1	200
BELTS & STRAPS			
PRP-G5A-SS	Shoulder Strap	1	40
PRP-G5A-SBLT	Standard Belt with Cushion	1	10
SPARE PARTS			
PRP-G4-HLAT	Headtop Lamp Bracket	1	10
PRP-G5A-QRBT1	Quick-connection Hose (Including O-ring and hose cover)	1	20
PRF-G5ATX-DECON	Decon Cleaning Plug Kit with Inlet and Outlet Plug	1	100
PRP-G4G5A-AFI	Flow Meter	1	24
PRP-G4-HARN1	Head Harness	1	50
PRP-G4-HTRIB	Headtop Ribbon	1	50
PRP-G4-HTCHIN	Headtop Chinstrap	1	50
PRP-G4-SW	Forehead Sweatband & Back Pad	1	100
PRP-G4-HTFC	Standard Face Seal	1	100
PRP-G5A-HTVFA	Visor Frame Assembly	1	25
PRP-G5A-LC	Protective Visor	1	50
PRP-G4-HLSHADE5	Shade 5 Visor	1	50
PRP-G4-HTHBUT	Headtop Buttons	2	100
PRP-G4-TOVF	Tear Off Visor Film (10 pack)	10	100



**INTRINSICALLY
SAFE BATTERY**
PRP-G5A-BATI



HEADTOP
PRP-G5A-HTC



**BLOWER
COMPLETE KIT**
PRP-G5ATX-BLO



FILTERS
SEE ABOVE



**DECON CLEANING
PLUG KIT**
PRF-G5ATX-DECON