



# ESM+PF50

Powered Air Purifying Respirator

LAB/PHARMACEUTICAL/HEALTHCARE

## All-in-One Head Mounted Powered Air Purifying Respirator. Enhanced for Maximum Mobility and Protection in Light Duty Industries.

The PureFlo ESM+ PF50 PAPR is revolutionizing the industry. With full NIOSH approval, this advanced all-in-one system is ideal for light duty industries, such as Pharmaceutical and Laboratory environments. The bump cap offers a lighter more comfortable design while the neck cape can be wiped down or laundered.

### **KEY FEATURES**

- No belt mounted blower unit required, which improves comfort and makes the PAPR ideal for use with a range of protective workwear
- All in one head, eye, face, and respiratory protection
- Provides effortless breathing when compared to non-powered air purifying respirators
- Smooth continuous flow of air through filter located at rear
- Advanced electronics package continually monitors airflow/ filter and battery and provides a self-diagnostic system check to ensure proper functioning
- High flow rate at 8.1 CFM/230Lpm
- 4 cape styles including single / double bib Integrity 1800 or single / double bib Tychem
- Securely sealed face shield manufactured from high-impact resistant polycarbonate with anti-scratch coating on both sides provides protection against high impact and splashes
- Bump cap offers a lightweight PAPR
- Quick Release Headband makes the product simple to clean and allows the helmet to be adjusted quickly and easily for different head sizes and shapes, achieving optimum comfort, balance, and fit
- Choice of HEPA (HE) filter or a combination HE/HF/HC filter (Hydrogen Fluoride and Hydrogen Chloride); both remove 99.97% of liquid or solid based particulate contaminants; effective for removal of nuisance odors from organic vapors
- Corrosion resistant gold-plated battery packs and rustproof hardware for added durability
- PCB altitude sensor that adjusts air flow automatically
- Enhanced Blower/Motor assembly includes:
  - Integrated on/off switch with optional external on/off
  - Sealed electronics enclosure requires less maintenance and improves reliability
  - · Low fan vibration provides a quiet experience for the wearer



Specifications	PureFlo ESM+ PF50
System Classification	Powered Air-Purifying Respirator (PAPR)
Face Shield/ Eye Protection	ANSI Z87.1+ :2015 Certified; SEI Certified and Listed
Respiratory	NIOSH 42CFR84
Filter Type	HEPA (HE) or HEPA/HF/HC *Nuisance OV
Flow Rate	8.1 CFM or 230 Liters/Min
Noise Level	Under 70dB
Weight	PF50 ESM+ without filter and batteries = 2.482 lbs. PF50 ESM+ w/ filter (no batteries) = 2.910 lbs. PF50 ESM+ complete w/ batteries and filter = 3.657 lbs
Assigned Protection Factor (APF)	APF 1000 Neck Cape demonstrated by SWPF study/testing
Head Size Range	6 3/8" - 7 7/8" or 54 - 61cm
<b>Charger Specifications</b>	110V/240V AC/50 or 60 Hz/200 mA
Battery Type	5 Cell Nickel Metal Hydride 6v 2.2 Ah per pack
Battery Duration	Up to 7 Hours with Two Batteries
Recharge Time	2.5 Hours from Full Discharge





# ESM+ PF50 PAPR

#### **KEY FEATURES** CONTINUED

#### **Optional Accessories**

- Tychem 2000 (QC) Disposable Overhood, designed to help protect the head from limited liquid chemical splashes and dusts when worn with a PureFlo ESM+ PAPR.
- Secondary Visor Attachment that lets you attach a variety of different visors: gold coated, mesh, shades of green.
- Multi-Charger
- Carry Bag

#### **Available Neck Capes**

#### Integrity 1800 Neck Cape

- Recommended for pharmaceutical, biotech and similar applications, class 10 (ISO Class 4) and higher.
- Made of densely woven continuous filament polyester fabric with an ESD stripe designed to meet the quality and performance standards in critical Cleanroom environments around the world.
- Highly fluid repellent (Teflon<sup>®</sup> HT treatment) and also contains a durable antimicrobial treatment (Aegis) to inhibit bacterial growth and reduce bioburden.
- Adjustable neck cord.
- Two Velcro attachments for securing free end of lanyard.
- Twelve snap fasteners for easy removal and attachment.

#### Tychem<sup>®</sup> Single and Double-Bib Disposable Neck Capes

- Dupont Tychem® 2000 fabric starts with Tyvek® brand fabric and adds a polyethylene coating for added chemical protection.
- Tychem 2000 fabrics are tested by a third party laboratory to assess its chemical penetration resistance.
- Protects against light liquid splash with at least 30 minutes of protection against more than 40 chemical challenges.
- Used by many in the petroleum, pulp and paper, food and chemical processing, and pharma industries.
  Protects against biological hazards,
- such as exposure to blood or blood-borne pathogens, pandemic preparedness response.

## STEDPRENE® (flame retardant) Neck Cape

- Flame Resistant as per ASTM D6413
- Abrasion Resistant Flash Fire Protection as per ASTM F1930
- Chemical Penetration Resistance as per ASTM F903
- Adjustable neck cord
- Two Velcro attachments for securing free end of lanyard
- Twelve snap fasteners for easy removal and attachment



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