

M53AI

ONE MASK, ALL MISSIONS



Air Purifying Respirator

AVON
PROTECTION

M53A1

ONE MASK, ALL MISSIONS



Based on the US Government Joint Service General Purpose (JSGPM) program, the M53A1 was specifically designed to meet the unique requirements of Special Mission Units while providing the maximum operational flexibility.

The M53A1 was developed to counter the military unique and domestic threats encountered on the modern battlefield, global war on terrorism, and peace keeping operations around the world. The M53A1 provides excellent protection against traditional chemical and biological agents, select toxic industrial chemicals (TICs), and particulate matter including radioactive dust.

The M53A1 can function as a conventional negative pressure or air purifying respirator (APR), powered-air purifying respirator (PAPR), Self-Contained Breathing Apparatus (SCBA), closed-circuit breathing apparatus (CCBA) and combination SCBA and PAPR systems.



The M53A1 mask is NIOSH certified in the following configurations:

- M53A1 mask with CBRNCF50 canister certified under CBRN APR standard Cap 1
- M53A1 mask with C420 blower is certified under CBRN PAPR Standard
- M53A1 mask with MP-PAPR system is certified under CBRN PAPR Standard
- M53A1 mask with CFP100 canister certified under 42CFR84 P100 standard.

KEY FEATURES

- The flexible, panoramic eyelens minimizes visual stress and maximizes field of view; provides ballistic protection and scratch resistance
- 6 point skull cap head harness with low profile pre-adjusted brow straps
- Fail safe, high flow hydration system
- First dual use approved military respirator; MIL-SPEC and NIOSH approved
- The variable resistance exhalation unit provides unique capability to use the M53A1 Protective Mask in multi modes of operation.



OPERATIONAL FLEXIBILITY

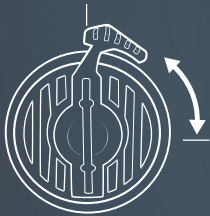
- Available in 4 sizes for custom fit for all operators
- 5 interchangeable silicone nose cups for improved comfort and performance
- Comfortable reflex seal with low profile brow for helmet compatibility
- Optional outserts are available for added protection and comfort while working in adverse environments. Available outserts include clear, sunlight, blue-blocker, laser, mirrored, and breaching.
- Single piece flexible polyurethane eyelens provides maximum field of view as well as ballistics protection and is scratch resistant

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SPECIALIST MASK

- Most operationally flexible mask on the market; one mask all missions!
- The unique chlorobutyl/silicone blend face piece material ensures the mask is not only high in protection but also provides a better seal and is more comfortable to wear for extended periods
- Flexible facepiece provides superior cheek-to-stock weld for weapons integration
- Reduced buckle size for suit/helmet integration
- Available in single port and twin port models

MODES OF OPERATION



- M53A1 functions in both negative (APR, PAPR, CCBA) and positive pressure (SCBA, combination) modes
- Mode selection lever located on the valve cassette assembly allows the operator to switch between modes without removing the amplifier or loss of protection

COMMUNICATIONS

- Electronic pass-through for external radio use
- Internal microphone assembly for enhance audio performance
- Modular design ensuring maximum communications compatibility
- Low profile, externally mounted amplifier for optimum inter-team communications

FILTRATION

- **M53A1 + General Purpose (GP) Filter**
Meets the military unique environments of mil-spec PRF EA-M-10006. It is not a NIOSH approved configuration
- **M53A1 + CS/CN Filter**
Meets military unique environments of mil-spec PRF EA-M-10006 for use during use of riot control agents, biological agents or particulate hazard environments. It is not a NIOSH approved configuration.
- **M53A1 + CFP100**
Particulate protection in NIOSH required environments. NIOSH certified configuration.
- **M53A1 + CBRNCF50 Canister**
CBRN response in NIOSH required environments. NIOSH certified configuration.
- **M53A1 + MP-PAPR + CBRNCF50 Canister**
CBRN response in NIOSH required environments. NIOSH certified configuration.

M53A1

*M53A1 mask is currently NIOSH certified in Negative Pressure mode ONLY.

**Mask shown with Audio Frequency Amplifier attached.

| M53A1 Mask Specifications | |
|--|-----------------------|
| CBRN Agent Resistance | M53A1 performance |
| Mustard (H) | Greater than 36 hours |
| Sarin (GB) | |
| Soman (GD) | |
| VX | |
| Laboratory protection factor performance (sodium chloride) | Greater than 10,000 |
| Breathing Performance (excluding filter) | |
| Re-breathed CO ₂ | 0.8% |
| Inhalation resistance at: | |
| 85 l/Min | 15 mm WG |
| 160 l/min | 32 mm WG |
| Exhalation resistance negative pressure mode: | |
| 85 l/min | 15 mm WG |
| 160 l/min | 30 mm WG |
| Exhalation resistance positive pressure mode: | |
| | 40 mm WG |

| Weight | |
|---|--|
| M53A1 mask (excluding filter) | 1.6 lbs. |
| Field of view | |
| Visual field Score - NIOSH CBRN standard | 96 |
| Materials used | |
| M53A1 Mask Visor | Flexible polyurethane |
| M53A1 Mask Facepiece | Chlorobutyl/Silicone Rubber |
| Hydration | |
| Drinking Flow Rate | >230 ml/min |
| Certifications | |
| M53A1 with CBRNCF50 and CBRNCF50i Canister | NIOSH CBRN APR standard Cap 1 Approval Number TC-19992 |
| M53A1 with MP-PAPR | NIOSH CBRN PAPR standard Cap 1 Approval Number TC-14G-0350 |
| M53A1 with General Purpose and CS/CN filter | Certified to Military Specification PRF EA-M-10034 |
| M53A1 with CFP100 canister | NIOSH 42CFR84 P100 standard Approval Number TC-84A-9235 |

FRONT COVER: M53A1 with CS/CN filter shown is not a NIOSH approved configuration.

INSIDE COVER: M53A1 with GPC filter shown is not a NIOSH approved configuration.



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Industry Certified Protection Factors

NATO standard protection factors give

reassurance that the mask has been

rigorously tested to optimum levels.

NIOSH CBRN APR certified TC- 19992.

NIOSH CBRN PAPR certified TC-20223.

NIOSH CBRN PAPR certified TC-14G-0350.

NIOSH 42 CFR 84 P100 certified TC-84A-9235

US DOD MIL-SPEC

M53A1 is certified to US Military

Specification PR EA-M-10034

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