

FM50™

**THE NEW
GENERATION**

DEDICATED TO MILITARY



AVON
PROTECTION

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FM50 is the latest generation CBRN full face mask specifically designed to meet the latest NATO forces military mask requirements. Developed to counter the multiple CBRN threats encountered in modern war fighting, anti-terrorist and peace-keeping operations, the FM50 brings a whole new dimension to respirator design, comfort and protection.



FM50



UNIQUE VISOR TECHNOLOGY

- Unique polyurethane visor is highly flexible plus scratch and impact resistant.
- Fully optically correct.
- Panoramic visor design gives maximum field of vision and wearer recognition.

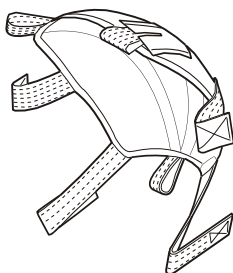
COMMUNICATIONS

- Electronic Communication Port (ECP) allows a Voice Projection Unit (VPU) to be safely connected in a CBRN environment to an internal microphone.
- Additional communication systems can be attached via this ECP using an appropriate lead.



USER COMFORT

- Available in 3 sizes.
- Chlorobutyl rubber and silicone blend giving the mask a high degree of flexibility and comfort for extended use.
- Unique twin conformal low profile filters.
- 6 point skull cap head harness with low profile pre-adjusted brow straps.
- Reflex seal with low profile brow for helmet compatibility.
- Extended chin flap for CBRN garment compatibility.
- High flow fail safe drinking device enables connection to a canteen or bladder type system.



ACCESSORIES

- A fully integrated, lightweight protective hood is available in 2 sizes:
 - Manufactured from the latest materials, providing full head and neck protection.
 - 24 hours protection against agent permeation.
 - Flame retardant and tested to 800°C.
 - Simple to install and remove.

- Range of mask carriers.
- Clear outserts for extreme environments.
- Blueblocker outsert delivers sharper images by filtering out specific light wavelengths
- Sunlight outserts for high intensity light situations.
- Laser outserts for protection against specific wavelengths.
- Vision correction assembly allows prescription lenses to be mounted inside the mask.
- Military canteen or bladder type systems for hydration.
- Voice Projection Units for voice amplification.
- Range of earpieces and headsets including bone conduction devices.
- Push to talk options.
- Sizing Gauge.



FILTRATION

- Twin filter design significantly reduces breathing resistance and improves weight distribution.
- Bayonet fit provides quick and efficient filter attachment.
- Filters can be replaced without breaking the protective seal through self sealing valves.

FM50 Accessories

COMMUNICATIONS



VOICE PROJECTION UNIT

VISION



CLEAR OUTSERT ASSEMBLY



BLUEBLOCKER OUTSERT ASSEMBLY



SUNLIGHT OUTSERT ASSEMBLY



LASER OUTSERT ASSEMBLY



VISION CORRECTION ASSEMBLY

STORAGE AND CARRIERS



UNIVERSAL CARRIER

MASK HOODS



TACTICAL HOOD

FM50 Technical Data

The FM50 has been designed to be compliant with the latest US and NATO military CBRN requirements. The following data gives a good indication of its performance.

FM50 Mask Performance

CBRN Agent Resistance	FM50 Performance
Mustard (H) Sarin (GB) Soman (GD) VX	Greater than 36 Hrs
Laboratory Protection Factory Performance (Sodium Chloride)	Greater than 10,000

Weight	
FM50 mask (including twin filters)	840 grams

Breathing Performance		
Re-breathed CO ₂	0.8%	
Inhalation Resistance at:	Mask Only:	Mask & Filters:
30 L/Min	2 mm WG	10 mm WG
95 L/Min	8 mm WG	30 mm WG
160 L/Min	12 mm WG	64 mm WG
Exhalation resistance at:		
85 L/Min	7 mm WG	
160 L/Min	12 mm WG	

Field of View	
Visual Field Score – NIOSH CBRN APR Standard	96

FM50 Filter Performance

The FM50 filter canister protects the wearer against all chemical and biological agents in aerosol, liquid and vapour form including:

a. Nerve Agents "G" Series "V" Series Any thickened form of agent	b. Blister Agents Mustard Lewisite Any thickened form of agent
c. Blood Agents Hydrogen Cyanide Cyanogen Chloride Chloropicrin	d. Riot Control Agents CS CN OC (Pepper Spray)

Typical filter performance compared to NIOSH CBRN Cap 1 requirements:

NIOSH CBRN Test Agent	Typical Performance	NIOSH CBRN Cap 1 Requirement
Cyclohexane	>20 mins	15 mins
Hydrogen Cyanide (AC)	>45 mins	15 mins
Cyanogen Chloride (CK)	>45 mins	15 mins
Phosgene	>100 mins	15 mins

FM50 Mask Assembly	
Description	Part Number
FM50 Mask Assembly LGE	71400/1
FM50 Mask Assembly MED	71400/2
FM50 Mask Assembly SML	71400/3

FM50 Mask System	
Description	Part Number
FM50 Mask System LGE	71450/1
FM50 Mask System MED	71450/2
FM50 Mask System SML	71450/3

FM50 Mask Systems contain:
Mask Assembly, Primary Filters (Pair), Clear Outsert, Operator Manual, Mask Carrier (Black)

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