

# MSA Responder™ CBRN PAPR





A belt-mounted powered air-purifying respirator with choice of 2 proven tight-fitting facepieces in 3 sizes. The motor-blower provides a constant air flow of over 115 lpm to the facepiece. The PAPR can be used with CBRN cartridges or with multi-purpose chemical cartridges designed to protect against hazards that might be encountered in tactical law enforcement operations.



- ➔ Protects First Responders for up to 8 hours under many hazardous conditions
- ➔ First PAPR to have CBRN approval for tight fitting facepieces
- ➔ Choice of 2 proven positive-pressure facepieces, the MSA Millennium® or the MSA Ultra Elite®
- ➔ Choice of CBRN cartridge (pending approval) or multi-gas / particulate chemical cartridges for non-CBRN use

#### About the CBRN PAPR Standard

NIOSH released a CBRN standard for powered air-purifying respirators (PAPRs) in October 2006.

After extensive testing to that standard, MSA's Responder CBRN PAPR was the first PAPR to receive NIOSH certification for tight fitting facepieces as "compliant against CBRN."

## MSA Responder CBRN PAPR

The MSA Responder PAPR (Powered Air-Purifying Respirators) system is ideal for First Responder, Military and Special Operations personnel who need non-IDLH respiratory protection for an extended period of time. The MSA Responder PAPR combines an industry-leading motor-blower with a choice of two proven MSA gas mask CBRN facepieces, and three proprietary cartridges for CBRN, particulate, or poisonous gases / vapors.

The Responder PAPR's constant filtered airflow provides improved comfort due to the cooling effect, greatly reducing pulmonary stress, preserving strength and mental acuity. The airflow also prevents fogging in the facepiece, reduces any feelings of claustrophobia, and allows for extended use in hot and stressful environments.

## C420 Motor-Blower

Industry trusted, with over 50,000 fielded in various U.S. military programs, the C420 Motor-Blower is ideal for filtering contaminants from ambient air and providing a constant airflow of at least 115 lpm to the user's facepiece. This provides an OSHA-assigned protection factor twenty times greater than APR, due to positive pressure in the mask.

The C420 is available with 2 batteries that can be "hot-swapped" during warm environment use. The Lithium-Sulfur Dioxide mission battery has an 8-hour run-time. The Nickel Metal Hydride rechargeable battery has a 4-hour run-time.

The motor-blower will not interfere with radio communications, as it is EMI shielded to MIL-STD-461C.

The C420 comes complete with the motor-blower, belt, airflow indicator, and breathing tube.



#### C420 PAPR Specifications

<b>Maximum Flow Rate</b>	130-140 lpm (High or single-speed)
<b>Power</b>	Battery, LiSO2 BA 5800/U: operates 8 hours. Battery, Rechargeable: operates 4 hours
<b>Ambient Temperature</b>	-32 to 49°C / -26 to 120°F
<b>EMI</b>	MIL-STD-461C, Part 4, RE02
<b>Environmental</b>	Water and dust protection - IP68 (inlet & outlet ports closed)
<b>Decontamination</b>	Decontaminable – performance not affected adversely
<b>Expected Working Life Of Blower</b>	(MTTF) >1,000 hrs (per EA-DTL-1827)





# MSA Millennium Facepiece

MSA's Millennium Facepiece is based on a highly successful military gas mask. The wearer enjoys a wide field of view and configuration flexibility, making it possible to perform required tasks, including firing weapons, more safely. The wearer can communicate easily while wearing the Millennium CBRN Gas Mask.

The lightweight mask provides a tight seal on the face, with a nose cup for reduced fogging. The material is permeation-resistant to chemical agents such as mustard (HD), providing maximum assurance to the wearer. An optional butyl-coated nylon hood provides total head protection. A voice amplifier system is also available.

Super-soft black Hycar rubber exceeds CBRN permeation requirements

Breathing tube inlet ports on left and right sides enable weapon sighting from either side

Six-point head harness means easy donning, adjustment, and removal, with no hair pulling

Flexible, one-piece polyurethane lens eliminates uncomfortable pressure points

Integrated hydration system



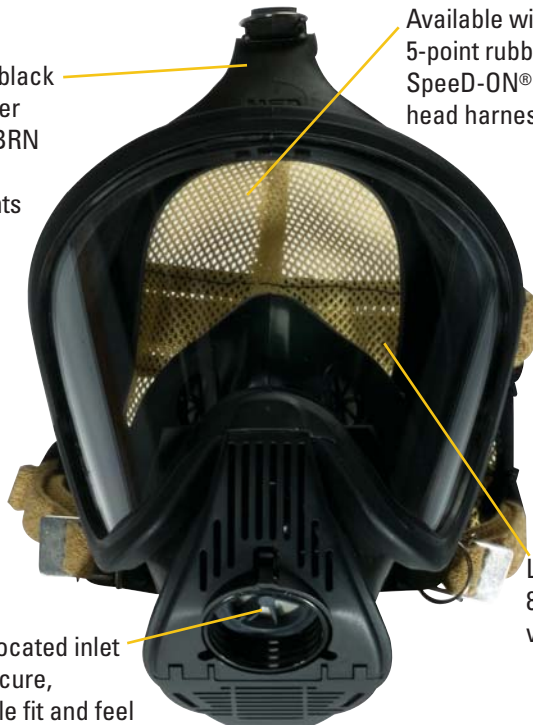
# MSA Ultra Elite Facepiece

Super-soft black Hycar rubber exceeds CBRN permeation requirements

Available with a 5-point rubber or Speed-ON® head harness

Centrally located inlet port for secure, comfortable fit and feel

Large lens with 83% unimpeded vision



MSA's Ultra Elite facepiece has been field-proven and trusted by First Responders to provide exceptional fit, comfort, and value. The soft black Hycar rubber mask has a centrally located inlet port and large lens for maximum visibility.

A centrally located mechanical speaking diaphragm enables clear communication while the optional ClearCommand® Amplifier offers increased communication capabilities. The Ultra Elite facepiece provides identical sealing surfaces for SCBA, APR, and PAPR, eliminating the need for redundant fit testing.

# MSA Cartridges

## Responder CBRN Cartridge

The MSA Responder CBRN Cartridge is NIOSH-approved for both PAPR and APR. It contains chemical sorbents and a P100 filter to attract, retain, and neutralize contaminants.

## Optifilter® XL HE

The Optifilter XL Type H filter is a HEPA P100 particulate filter that is 99.97% efficient against all aerosols, oily and non-oily. This filter is effective against particulates such as dusts and mists but not poison gases or vapors. The Optifilter XL HE is the right choice for dust filled environments.



## PAPR GME Multi-gas HE

The PAPR Multi-gas HE is a combination cartridge that contains the P100 filter and a bed of activated carbon to absorb poison gases and vapors. The cartridge will filter out a broad spectrum of agents such as: acid gases (including chlorine, sulfur dioxide, and chlorine dioxide), and ammonia, formaldehyde, and organic vapors. Choose the PAPR GME Multi-gas HE cartridge for OSHA-regulated chemicals with concentrations greater than the TLV.

### Ordering Information:

You must choose C420 PAPR Kit, facepiece, and cartridge for a complete system

#### C420 PAPR Kits (less facepiece and cartridge)\*\*

C420 PAPR Kit with 30" Breathing Tube	B-60141-030
C420 PAPR Kit with 36" Breathing Tube	B-60141-036

\*\* Includes C420 PAPR, Belt, Airflow indicator & Breathing tube

#### Gas Mask Facepieces with Head Harness (less cartridge)

Millennium Facepiece, Small	10051286
Millennium Facepiece, Medium	10051287
Millennium Facepiece, Large	10051288
Ultra Elite Hycar Gas Mask with rubber Head Harness, Small	10052776
Ultra Elite Hycar Gas Mask with rubber Head Harness, Medium	10052781
Ultra Elite Hycar Gas Mask with rubber Head Harness, Large	10052778
Ultra Elite Hycar Gas Mask with Speed-On Head Harness, Small	10052780
Ultra Elite Hycar Gas Mask with Speed-On Head Harness, Medium	10052779
Ultra Elite Hycar Gas Mask with Speed-On Head Harness, Large	10052777

#### Cartridges

PAPR Responder* CBRN cartridge, each	10046570
OptiFilter XL cartridge, 6-pack	496081
PAPR GME Multi-gas HE cartridge, each	10072237

### Accessories

For C420 PAPR

NiMH Rechargeable Battery Kit (2 NiMH Batteries, Charger & Cap)	B-20040-001
LiSO2 Battery	M-20020
30" Breathing Hose Assembly	S-30116
36" Breathing Hose Assembly	S-30118
NiMH Rechargeable Battery Pack	S-20036
NiMH Rapid Battery Charger	B-20090-001
NiMH Rechargeable Battery Cap Assembly	B-30060-001
Web Belt Assembly	S-30019
PAPR Carrying Case	B-10079-001

For Ultra Elite Facepiece

ClearCommand® Communications System	
Amp	10024074
Amp / RI	10051290
Bracket Only	10023055
Butyl Hood	305022
Cover Lens	
Clear	491500
Tinted	805456
Spectacle Kit	804638

Storage Devices

Pouch	10034184
Case	D2056734

For Millennium Facepiece

ESPII Communications System	10026265
Butyl Coated Nylon Hood	305022
Gas Mask Pouch	10034184
Spectacle Kit	816137

Cover Lens

Clear, Small	10008907
Clear, Medium/Large	10008906
Tinted, Small	10008909
Tinted, Medium/Large	10008908

**Note:** This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



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