



**AirBoss Defense**  
*The Ultimate Protection*

## CBRN CAP 1 C420 PAPR SYSTEM

NIOSH APPROVED:  
TC-14G-0317 CBRN CAP 1

### **PRODUCT OVERVIEW**

The C420 Powered Air Purifying Respirator (PAPR) is the most popular military and First Responder PAPR system in the world, and is employed in military, tactical, aviation, and industrial applications.

The IRT CBRN CAP 1 C420 PAPR system provides breathing protection in compliance with NIOSH certifications for PAPRs in environments below Immediately Dangerous to Life or Health (IDLH) levels, and protects the face, eyes, and gastrointestinal tract against known chemical, biological, radiological, and nuclear hazards in aerosol, liquid, and vapor form including Nerve, Blister, Blood, and Riot Control agents.

The IRT CBRN CAP 1 C420 PAPR system also protects against Toxic Industrial Chemicals (TICs) such as chlorine, hydrogen sulfide, sulfur oxide, formaldehyde, nitrogen dioxide, phosgene, phosphine, and ammonia.

The IRT C420 PAPR system filters contaminants from ambient air and provides a constant, filtered airflow between 115 and 140 liters per minute to the user's facepiece providing an exceptionally high safety factor due to positive pressure in the mask.

The cooling effect of constant filtered airflow into the facepiece provides a high degree of user comfort, extends operational endurance, and facilitates heavier work performance, even after extended wearer times in humid, heated and highly stressful conditions. The airflow prevents fogging in the facepiece and drastically reduces feelings of claustrophobia.

### **FEATURES & BENEFITS**

- Greatly reduces pulmonary stress
- Preserves strength and mental acuity
- Helps ensure mission success
- Increases protection factor
- Decontaminable
- Battlefield proven technology
- Live agent tested
- NIOSH-approved
- Lightweight and comfortable
- Economical

### **PROTECTION APPLICATIONS**

- CBRN Military Missions
- CBRN SWAT & Special Operations
- Decontamination Teams
- First Responder/First Receiver
- Chemical Suicide Protection
- Methamphetamine Lab Clean Up
- Chemical / Industrial Spill Clean up



# CBRN CAP 1 C420 PAPR System Performance

<b>Flow Rate:</b>	>115 lpm NIOSH minimum requirements
<b>Power:</b>	C420 Battery, LiSO <sup>2</sup> BA 5800/U: operates 7+ hours C420 Battery, NiMH Rechargeable: operates 4 hours
<b>Temperature Range:</b>	-32 to 71°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

## Overall Dimensions:

Width	220mm	7.87 inches (w/out filters)
Height	226mm	8.90 inches.
Thick	86mm	3.39 inches
Weight	675gr	1.5 lbs. (w/out cartridges and battery)
Weight	1590gr	3.5 lbs. (with (2) cartridges and battery)

**Note:** C420 live agent permeation testing of IRT C420 models, conducted at ECBC, Aberdeen Proving Ground by the U.S. Army, featuring live agent concentration levels greatly in excess of PAPR IDLH levels resulted in non-detect readings for live agent permeation of the IRT C420 blower.

## C420 PAPR System Customers

- U.S. Department of Defense
- U.S. Army Helicopter Crew (Apache M48, M49)
- U.S. Special Operations Command
- U.S. Joint Special Operations Command
- U.S. Navy Explosive Ordnance Disposal
- U.S. Marine Corps System Command
- U.S. Army Medical Material Agency
- U.S. Army Technical Escort Unit
- U.S. Army Reserve Chemical Companies
- U.S. Defense Threat Reduction Agency
- U.S. National Guard Civil Support (CSTs)
- U.S. National Guard CERF-P Teams (Decon)
- Federal Bureau of Investigation
- Air National Guard Fatality Search & Recovery Teams
- U.S. Treasury Department
- Department of Justice
- U.S. Department of State
- U.S. Army Explosive Ordnance Disposal
- U.K. Ministry of Defense
- Australian Ministry of Defense
- Federal, State & Local Police SWAT
- Clandestine Drug Lab Entry Teams
- Defense CBRN Response Force Units
- Homeland Response Forces
- NBC Search & Casualty Rescue Kits
- WMD Responder Kits Emergency Medical Care Kits
- Other Manufacturers' Private Labels