

Protecting Medical Professionals from Influenza (H7N9) & Respiratory Threats



IRT produces a complete line of NIOSH-approved, CBRN Capable and OSHA-compliant Respiratory Protection products based up IRT's proprietary Powered Air Purifying Respirators (PAPRs) and filters, including:

- C420 CBRN CAP I
- Flex Air™
- Pure Air™
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IRT's C420 CBRN CAP I, FlexAir™, and Pure Air™ Influenza and respiratory protection solutions are compact, lightweight **Powered Air Purifying Respirator (PAPR)** Systems with an onboard Lithium-Ion Battery installed in the waist-mounted blower. This flexible design permits the use of three multi-gas CBRN compliant filter cartridges for protection against: Influenza (H7N9); wartime and industrial CBRN agents in aerosols, liquid and vapor form, including Nerve, Blister, Blood and Riot control agents; and many Toxic Industrial Chemicals (TICs). The particulate filtering element meets/exceeds the NIOSH P100 level requirements, and protects against dusts, mists, biological agents and radiological dusts.

Hospital First receivers and Emergency First responders are protected from contaminated air purified by filtration media mounted on the PAPR blower unit and delivered via a lightweight breathing hose to the user's head cover.

Earlier this year ECBC conducted Simulated Workplace Protection Factor (SWPF) Study in accordance with Laboratory Respirator Protection Level (LRPL) test protocol at its Protection Factor Test Facility (PFTF) and tested IRT's Chemical FlexAir Powered Air Purifying Respirator (PAPR) with loose-fitting Butyl and Tychem SL Hood. The overall APF value for both the Butyl Hood Model S-40083-001 (95,000 APF average) and Tychem Hood Model S-40084-001 (80,000 APF average) were able to easily pass the required criteria of an overall APF of 1,000 when worn correctly with Tychem suits and IRT's Chemical FlexAir PAPR system. Actual results

exceptionally exceeded the OSHA required 1,000 APF.

Benefits:

- Greatly exceeds OSHA 1,000 APF requirements
- Accommodates facial hair and prescription lenses
- Increases work time on a single battery charge
- No Fit Testing Required
- Utilizes universal 40mm filter port threads and wide availability of filter media
- Independent low-flow and low battery alarms
- Universal head cover size reduce cost and inventory

Features:

The IRT Chemical FlexAir™ PAPR System features the latest innovations in PAPR design

- Microprocessor controlled
- Lifetime rechargeable Lithium-Ion battery (charged in unit)
- Compact rapid battery charger is a universal Li-Ion battery charger
- Lightweight and compact PAPR blower
- Exceeds NIOSH airflow requirements: >170 lpm (liters per minute)
- Independent low-flow and low battery alarms

Technical Specifications:

- Flow Rate Greater than 170 LPM
- Lithium-Ion On-board/Duration 7—8 Hours
- Expected Life of Li-Ion Battery 500 Charge/Discharge Cycles
- Cartridge Options (3 cartridges required) M96 Cartridge
- Operating Temperature -20°C to +49°C (-4°F to +120°F)
- Overall Dimensions (FlexAir™ PAPR Blower) (w/o cartridges)
Width: 94 mm (3.70")
Height: 134 mm (5.27")
Length: 106 mm (4.15")
- Weight of FlexAir™ Blower w/Battery
596 grams (1.32 lb) Blower w/Battery
1756 grams (3.87 lb) w/3 M96 Cartridges



Protects Hospital Workers based on OSHA's "Best Practices for HOSPITAL-BASED FIRST RECEIVERS OF VICTIMS from Mass Casualty Incidents Involving the Release of Hazardous Substances"