



## THE NEW HYBRID SOLUTION

Our innovative and customer led product design and evolution has enabled our range of hybrid life support systems to adapt, respond and predict the ever changing needs of our end users across the globe. The Hybrid Patriot 5510® provides an all-in-one holistic solution to respiratory protection allowing the user to adjust to conditions on the fly, minimizing equipment configuration and maximizing time on target. The Hybrid Patriot 5510 represents the next generation in high end tactical respirator protection capability and includes Self-Contained Breathing Apparatus (SCBA) mode, Powered Air Purifying Respirator (PAPR) mode, Air Purifying Respirator (APR) mode, and Supplied Airline (SAR) mode.

## HIGH PERFORMANCE PROTECTION

Developed in response to exacting customer feedback, the Hybrid Patriot 5510 has been designed to maximize operator time on target while at the same time increase comfort, improve ease of movement and significantly reducing operator fatigue.

The Hybrid Patriot 5510 is equipped for CBRN environments via specialized materials and design. The system uses high performance, reliable pneumatics which provide low breathing resistance and excellent dynamic performance. Integrated APR/PAPR modes further enhance operational capability in providing reduced breathing resistance options via two Cap1 filters, the latter being located behind waterproof covers on the central chassis.

Furthermore tactile low pressure and power alarms provide covert signaling of breathable air and battery power respectively. Advanced on-board electronics feature improved real time monitoring capabilities including cylinder pressure (PSI/Bar), battery, respiratory protection mode, as well as end user location and other sensor telemetry. This information can be shared amongst deployed teams and their command using mobile devices or tablets.

## RANGE OF SPECIFICATIONS

The Hybrid Patriot 5510 is a holistic respiratory solution to meet any mission profile with the exclusive BlueForce tactical situational awareness software package included. Other features include:

- Integrated SCBA/PAPR/APR/SAR
- Integrated VIP extraction/RIT capability
- Integrated breaching torch accessory with Hellboy handle
- FRR respirator that delivers the highest protection factors available on the market with unparalleled comfort, moisture removal and rapid re-hydration capability
- 30 minute duration in 5500psi/379bar air cylinders
- Modular backpack for 60min or 30min configurations

## ONBOARD ELECTRONICS AND SOFTWARE

Blueforce Tactical (BTAC) is a mobile software application that enables the rapid formation of tactical teams and facilitates information sharing amongst team members using Android or iOS devices brought to the tactical environment. The software enables shared situational awareness and extended presence of people, sensors, and services; and it provides secure information exchange between them using standard cellular, 3G/4G/LTE, FirstNet, WIFI, WiMAX, satellite, mesh, and/or mobile ad-hoc networks.

Blueforce's Extended Presence Protocol fuses geo-location, interior network location, health, and body-worn/person carried sensor data into a presence heartbeat that is light on the network, yet provides shared tactical awareness as to where your people are and what's going on around them. BTAC provides a software plug-in interface for integration of a multitude of sensor types. The Hybrid Patriot 5510 plugin enables users to monitor the status of their Hybrid Patriot 5510 and receive vibrate and tones when parameters like battery and PSI move outside of acceptable ranges. Teammates may monitor each other providing a mission critical solution for life safety and operational efficiency for team members and commanders.



## APPLICATION AREAS

BlueForce Tactical is suitable for a wide range of in the field applications, not limited to:

- Special Operations/SWAT
- Specialist Military and Law Enforcement teams
- Civil Support/CBRN/HAZMAT
- EOD and Bomb Teams
- Technical Rescue/SAR

## AUTONOMOUS MONITORING

Blueforce M2M Cloud Service software provides autonomous (unmanned) monitoring of deployed BTAC and Hybrid Patriot 5510 users and provides:

- Panic and/or Offline Monitoring
- Geofence Monitoring
- Diagnostic collection of Hybrid Patriot 5510 data for maintenance and/or after-action
- Comprehensive notification framework to include SMS, email, and workflow messaging services.

## COMMAND AND CONTROL

Blueforce Web Command Center provides attended monitoring of deployed BTAC and Hybrid Patriot 5510 users and provides:

- Real-time and historical tracking of subscribed BTAC users.
- Real-time monitoring and notification of Hybrid Patriot 5510 sensor warnings and sensor alarms.
- Secure text chat and "listen live".
- Charting of Hybrid Patriot 5510 historical data.
- Accelerometer, gyroscope, and monitoring of battery status of any subscribed BTAC endpoint.

## SECURITY

Blueforce Tactical for mobile is built on a FIPS 140-2 cryptographic provider and provides the following:

- AES-256 encryption for at rest data; X.509 V3 and/or SASL authentication support along with LDAP/AD directory services
- AES 256-bit TLS for data link session encryption
- Content Access Controls: End user may limit what data is sent and to which subscribed endpoint.

# AVAILABLE CONFIGURATIONS



## RESPONDER I CONFIGURATION

- Single 5500 PSI or 379 bar cylinder Rescue Cylinder (30 min) with integrated first stage regulator
- Emergency Breathing Support System (EBSS)
- Battery Speed Loader
- Chemically Hardened Chassis
- Adjustable Lightweight Backpack Carrying System
- 2 SCOTT CBRN CAP 1 Filters
- SCOTT FRR Gas Mask



## RESPONDER II CONFIGURATION

- Single 5500 PSI or 379 bar cylinder [capable of providing 30 minutes of SCBA air]
- Single 5500 PSI or 379 bar cylinder Rescue Cylinder (30 min) with integrated first stage regulator
- Emergency Breathing Support System (EBSS)
- Battery Speed Loader
- Chemically Hardened Chassis
- Adjustable Lightweight Backpack Carrying System
- 2 SCOTT CBRN CAP 1 Filters
- SCOTT FRR Gas Mask



## RESPONDER III CONFIGURATION

- Single 5500 PSI or 379 bar cylinder [capable of providing 30 minutes of SCBA air]
- Single 3000 PSI Oxygen cylinder with Hellboy™ exothermic cutting torch (sold separately)
- Emergency Breathing Support System (EBSS)
- Battery Speed Loader
- Chemically Hardened Chassis
- Adjustable Lightweight Backpack Carrying System
- 2 SCOTT CBRN CAP 1 Filters
- SCOTT FRR Gas Mask