

# EOD SUIT HFS SERIES III +

The HFS Series3+ EOD/IEDD Suit is the next generation in bomb suit development. Essentially an upgrade on the HFS Series3, with the core focus on improving the critical systems whilst still using the original solid HFS Series 3 platform. We have also addressed the requirements in the NIJ 0117.01 Bomb Suit Standard including the Blast and Fragmentation required performances.

Suit components : trousers, smock, blast plate, spine protector, helmet, overshoes and groin protector.

- Improved Suit integrity during blast exposure with enhanced over pressure attenuation layers
- New front facing Double Skin Outer Shell, with improved blast resistance and flame retardant
- Double locking blast plate mounting system
- IP 67 Electronics upgrade
- Lithium Ion power source
- Dual grab handle



Complete suit



Cooling suit

## EOD SUIT HFS SERIES III+

### Helmet upgraded aspects

- Advanced helmet liner with combined attenuation layer and ergonomic comfort layer
- Quick release helmet buckle
- NBC mask accommodation
- Powerful and silent ventilation (220 liters / min)
- New four point helmet stabilizing retention system
- Increased downward and periphery visibility



### Power Supply

The Series 3+ has an upgraded Lithium Ion Power pack which provides 8800 mAh. This system is capable of running both the Helmet Electronics System and the Cooling Suit System for more than 2 hrs. The Battery Pack is located in a pouch on the right hand hip of the suit. It is encased in sealed custom aluminium box where there are chassis mounted plug points to connect power to both the Suit Controller and the Cooling Suit Pump Controller. The entire electronics package is now set up to be IP67 compliant.

### Cooling Suit

The cooling suit, worn underneath the EOD bomb suit, helps to prevent heatstroke associated with thermo-stress, reduce fatigue and add comfort to responders.

These effects are achieved by circulating ice water throughout the body and head.

The water is circulated by means of a 12v battery operated pump worn externally on the EOD suit.

### Communication System

The base station is housed in a robust aluminium case which also contains its own 12V DC power supply which can be charged directly from 110/220 V or a 12 V car charger cable. The operation combines a built-in speaker and a headset with microphone.

The robust reel contains 120 m of shielded cable. It is equipped with a rotating contact which allows the operator to be in communication constant during cable deployment and recovery.

Wireless communication : certain models of wireless radio can be accommodated

Optional digital sound recorder.



### TECHNICAL DATA

Materials :  
 Cooling suit : Fire Resistant Kermel®/Nomex®  
 Outer cover of the suit : Nomex® / Kermel®  
 Inner material of the suit : Aramid Kevlar® / Twaron®  
 Helmet : Outer cover : Nomex®  
                   Outer shell : moulded GRP  
 Ballistic Visor : Hardened Acrylic/Polycarbonate  
 Blast plate : Composite matrix

Fragmentation performance 0.22 Cal 17 grain FSP :  
 Smock front : V<sub>50</sub>=645 m/s  
 Blast plate : V<sub>0</sub>=1800 m/s  
 Sleeves : V<sub>50</sub>=600 m/s  
 Trousers Thigh : V<sub>50</sub>=690 m/s  
 Helmet : V<sub>50</sub>=650 m/s  
 Visor : V<sub>50</sub>=790 m/s

Weights :  
 Cooling suit : 4 kg  
 Complete suit size L : 34 kg  
 Helmet and visor : 4.7 kg

Cooling :  
 Cold source : Ice cubes and water (2 liters)  
 Heat removal rate : 270 watts  
 Endurance : 45 minutes at 35°C (95°F).

Colors : navy blue, olive green, black.