THOR EOD SUIT

Technical Specification

Please note: This technical specification covers not only standard EOD Suit specifications but also cost options. Please refer to your unique quote for the specific details of any options included. Some options may not be available in all markets.

EOD SUIT:

Part Number: EOD001201

Suit Construction Materials

Outer Cover: High Tensile Strength – Blast Resistant Flame Resistant Nomex®/Kermel®
Velcro: External Velcro® fire resistant
Ballistic Materials: Aramid. Kevlar®/Twaron®
Blast Plates: Composite blast plate materials:

- VHH Armoured Steel, high-strength, low-alloyed structural steel
- UHMWPE laminate
- GRP laminate
- Aramid laminate

Visor: Hardened Acrylic/Polycarbonate
Cooling Suit: Fire Resistant Kermel®/Nomex®
Groin protector: Nomex IIIA outer
Multi layered aramid protective insert

Helmet

GRP Shell with elastomeric aramid core
Helmet liner: Multiple density layered closed cell foam for comfort and impact attenuation
Ventilation Fan: 0-220 lt/min

Cooling Suit

Part Number: EOD001204
Water Circulation Pump: 0-2.2 lt/min
Heat removal rate: 270 watt
Operation time: 35min at 45degree C ambient temperature

Suit Mass

Suit Medium 31Kg
Suit Large 34Kg
Suit X - Large 37Kg
Helmet with Visor 5Kg
Total Mass: See Individual Configurations

Suit Sizing

Suit Medium 165-175cm tall, operator mass 65-80kg
Suit large 175-185cm tall, operator mass 80-95kg
Suit X-large 185-195cm tall, operator mass 95-110kg

Auxiliary

NBC mask
PAPR Air Filtration

Sensor integration

1 off USB port for optional CBRNe sensor integration

Suit Protection

			.22 Cal 17grain FSP		.30 Cal 44grain FSP		.50 Cal 207grain FSP	
	Location	NIJ Location	NIJ REQ	HFS S 3+	NIJ REQ	HFS S 3+	NIJ	HFS S 3+
1	Blast Plates	A	N/R	1800+	1100	1200+	750	800+
2	Visor	B	775	794	N/R	N/R	N/R	
3	Helmet	C	625	656	525	621	N/R	
4	Trousers Rear	G	350	402	300	387	N/R	
	Overshoes							
	Hand Protector							
	Helmet Beard							
	Sleeves Rear							
	Smock Back							
	Groin Protector							
	Collar Rear							
5	Sleeves Front	F	525	602	500	509	N/R	
	Collar Front							
6	Smock Front	E	550	645	525	540	N/R	
7	Trousers Thigh	D	625	692	550	597	N/R	
8	Trousers Shin	F	525	573	500	514	N/R	
9	Collar Front Centre	N/R	N/R	892	N/R	N/R	N/R	
10	Knee	N/R	N/R	1082	N/R	N/R	N/R	

Suit Blast

	Explosive Charge	Standoff	Height	Chest overpressure reduction	Head overpressure reduction
1	567g of C4 (NIJ Test)	0.6m	0.77m	90%+	90%+

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THOR EOD SUIT
Technical Specification

Control System:
Part Number: EOD001202

Arm Control Unit
Weight: 470g
Description: Ruggedized tablet IP67
Video resolution: 720 x 1600
Screen size: 6.5”

Cameras
Lens Angle: 120°
Type: Colour CCD
Resolution: 1920 x 1080p 30fps (2.1MP)
Sensitivity: 1000mV/Lux-sec (0.65V/lux-sec@550nm Min Illumination)

Lights
White Light (LED): 640lm (variable intensity)
Red (LED): (variable intensity)

Battery
Recharge Time: 6 hours
Battery BT-70757Bx: 3.4Ah@24V & 6.8Ah@12V Li Ion
Battery Life: > 200 cycles @ C/5 to 80% of initial capacity @ 100% depth of discharge
Battery Dims BT-70757Bx: 105mm x 37mm x 99mm
Battery Mass BT-70757Bx: 0.54kg

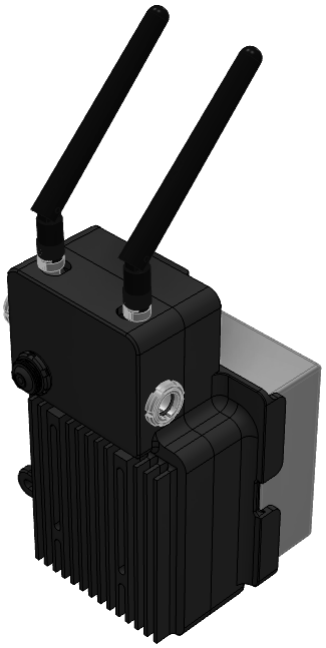
Mission Endurance
Battery: BT-70757Bx
Battery Life: 2-6 hours, mission dependant

Battery Charger details
Dimensions Charger
Length: 84mm Width: 56mm Height: 51mm
Power Supply: AC Adapter: AC 100V-240V 50/60Hz
Dimensions: Length: 132mm Width: 58mm Height: 30mm
Weight: 0.50 Kg
Power Requirements
100V-240V AC, 200 VA, 50/60 Hz
Environmental
Operating Temperature -20°C to +50°C (-4°F to +122°F)
Storage Temperature -40°C to +70°C (-40°F to +158°F)

Communications
Wireless Communications
Range: 800m (See Note 1)

IP Mesh Transceiver
Encryption: AES 128
Communication Method: OFDM
Power: Variable 0.1W to 1W
Frequency: 1.415GHz – 1.465GHz (Others by request)
Channel Spacing: 8MHz

THOR EOD Operator Control Unit
Size: 160mm(L) 115mm(W) 95mm(D)
Weight: 1.6Kg (inc. battery)
Battery Type: BT-70757Bx
Description: Control station to send and receive audio to operator in suit. Can also be used as a separate radio node or to increase radio range.



Note 1: The radio range achieved will be dictated by the land topography between the nodes. Ranges quoted are for guidance only; distances vary according to terrain and obstructions. In many situations increasing antenna height can greatly improve signal strength. To achieve the stated distance, it may be necessary to raise all antenna to at least 3m height.

Hard Wired Communications
Fibre Optic Tether Cable: 200m
Fibre Optic Tether
Length: 450mm, Width: 210mm, Height: 145mm
Tether Length: 200m
Mass: 2Kg

Environmental
Storage: -30°C to +60°C
Operation: -20°C to +45°C
Degree of Protection: IP65,

Control System Plus:
Part Number: EOD001203

Operator Control Unit
Case Size: 490mm(L) 390mm(W) 185mm(D)
Weight: 9.52Kg (inc case), 5.2Kg
Description: Ruggedized tablet
Video resolution: 1920 x 1080
Screen Brightness: 1000 nits
Screen size: 11.6”

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