

# DEFENDING THE FORCE



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## Critical Mission Success with SkyDome® Man-portable Counter-UAS System

Fortem Technologies' man-portable C-UAS system is an end-to-end solution to detect, assess and defeat Group-1, 2 and low-end Group 3 drone threats. This rapidly deployable, two-person carry system provides multi-kilometer detection, and the flexibility to operate either with dedicated power or hot-swappable battery power so it can protect critical infrastructure, war fighters in degraded environments, or other key assets.

The system can operate day or night, in adverse weather conditions, to intercept and mitigate drone threats up to multiple kilometers away from operators. Operators can track airborne drones in remote areas as well as dense urban environments, leveraging SkyDome Manager's visual maps that show the threat's speed, size, and flight path.

<b>Detect</b>	<b>TrueView® Radar</b> detects and tracks low-flying, slow-moving drones in 3D with extreme precision. Able to resolve objects just meters apart, our radar excels in metropolitan areas.
<b>Assess</b>	The <b>SkyDome Manager</b> , driven by an AI risk assessment engine, evaluates threats, assigns threat levels and provides detailed, real-time telemetry about objects seen as a threat.
<b>Defeat</b>	The autonomous <b>DroneHunter® F700</b> provides long-range defeat with low collateral of drone threats with safe low collateral damage effectors.



### Two-person Carry Operational System

- Radar Monitoring System (4-hour hot-swappable battery)
- DroneHunter in Hard Case
- Counter-UAS Command & Control Software & Hardened Laptop
- DroneHunter Operational Equipment (Net system, battery, etc.)

### Counter-UAS Operational Support Kit

- Equipment for additional operational missions and maintenance.

## Man-portable Counter-UAS System Overview

Detection Distance for Group 1 & 2 Drones*:	2-3.5km
Mitigation Distance:	0.5 to 3km
Operational Carry Weight: (2 Person Carry)	89 kgs (196 lbs)
Packaging of Operational System:	2 x Backpackable hard cases and 1 hand carry hard case
Battery Operational Time:	4 hours per hot-swappable battery set (supports dedicated power)

\*The system can be used with multi-rotor and fixed wing drones, including low-end Group 3 fixed wings.

### System Components Specifications

TrueView R30 Radar	
Dimensions	429 mm (16.87 in) x 281 mm (11.09 in) x 95.8 mm (3.77 in)
Weight	7.0 kg [15.5 lbs]
Operating Temperature	-40 °C to +55 °C (-40 °F to +131 °F)
Power Transmitted	7.9 W (+39 dBm)
Processing Power	1 teraflop
Number of RX Channels	16
Track Update Rate	Between 64 ms and 3 s, configurable
Maximum Field of View	Up to 120° azimuth x 120° elevation, configurable
Angular Accuracy	± 1° azimuth, ± 1° elevation
Minimum Target Radial Velocity	0.15 m/s or less, configurable
Simultaneous Tracked Targets	50, configurable
DroneHunter F700	
Dimensions	<ul style="list-style-type: none"><li>Wingspan tip-to-tip: 1980 mm (77 in)</li><li>Length tip-to-tip: 1630 mm (63 in)</li><li>Height (landing gear down): 690 mm (27 in)</li></ul>
Takeoff Weight (battery, net guns, radar)	18 kg (40 lbs)
Operating Temperature	-10°C to +50°C
Average Time to Complete Mission	1-3 minutes typical (~.5 - 1.5 km)
Maximum Flight Operating Radius	4 km (2.5 miles), depending on the environment.
C2 Wireless Link Encryption	AES-128 or AES-256
Time to Reload for the Next Mission	Less than 3 minutes, assuming swap of battery and NetHeads.
Maximum Speed	25 m/s (56 mph) in attack and pursue modes; targets faster than DroneHunter are intercepted in defense modes (see modes below).
Attack Mode	DroneHunter actively chases and captures an offending drone. This mode is used when the DroneHunter determines that it is faster than the target.
Defense Mode	DroneHunter assumes a defensive stance ahead of a fast approaching drone and captures the drone as soon as it is within range.
Pursue Mode	DroneHunter investigates an intruding drone up close, streaming live footage to SkyDome® Manager. Flashing lights and sirens can be activated as a warning.