D-FEND SOLUTIONS

D-Fend Solutions' High-Altitude Tactical Kit

Security at Urban Rooftop or Rural Mountainous Site

Safeguarding airspace in urban environments or hilly, mountainous terrains can be especially challenging. For optimal protection, a counter-drone system should be deployed at a higher-rise point, providing maximum radio coverage to the entire area. In dense urban environments, it means the system being deployed at a high rooftop, which may result in a situation where drones can fly not only from above the system, but also from below.

To address these challenges in high-altitude deployments, the ideal, field-proven solution should cover airspace both above and below the horizon, in a system that is light and portable, yet ruggedized and robust, so it can be easily carried and deployed on rooftops and in high-altitude locations. Such a system and its hardware must be capable of enduring the full spectrum of high-altitude weather conditions, such as extreme heat, cold, dust and precipitation.

The Ultimate Counter-Drone Solution for High-Altitude Tactical Deployments

D-Fend Solutions High-Altitude Tactical Kit is designed to enable and optimize EnforceAir's performance in this demanding environment. The kit provides the ultimate in operational agility and flexibility in high altitude environments, as its core elements can be easily transferred, mounted and configured within minutes, enabling personnel to go anywhere at any time.

EnforceAir's High-Altitude Tactical Kit is particularly suitable for urban and sensitive environments, covering drones coming at both high and low altitudes, from below and above the horizon.

Innovative Features

EnforceAir's High-Altitude Tactical Kit is comprised of:

Tactical Folding Antenna

Ultra-wide-band folding antenna designed for tactical deployments, providing 360° azimuth coverage for protection from all directions, and ±40° elevation, suitable for urban and high-altitude deployments, and covering drones coming at both high and low altitudes.

Radio Frequency Cables – Tactical Set

A set of multi-pin RF cables and RF-extension cables, connecting antennas to the EnforceAir SDR unit and GPS port.

Sturdy Tripod with Tactical Brackets

Ruggedized, ultra-stable and sturdy tripod with quick installation, including fast installation brackets for the SDR unit and antennas, without the need for any tools. The tripod delivers top performance, along with the resistance and reliability to meet challenging environmental conditions.

Ruggedized Duffle Bag

Purpose-designed duffle bag that can transport the folding antenna, bracket and RF cables, optimized for mobile operations and ad-hoc system setups. With the duffle bag, EnforceAir's High-Altitude Tactical Kit can be easily deployed from a transportation vehicle to the rooftop, while keeping the system covert to not attract attention from the surrounding areas, especially in urban settings. The bag also protects the equipment during transportation from headquarters to deployment locations.

Benefits & Key Advantages

Rapid Deployment:
EnforceAir's High-Altitude Tactical Kit is comprised of light and compact hardware, for rapid and easy deployment. It takes minutes to install and start to operate, for increased operational flexibility.

Mobile Operation:
The Kit's easily foldable antenna can be readily transported in its purpose-designed ruggedized duffle bag.

Weather Resistant:
Ruggedized for all-weather environments, even in high humidity and high wind conditions, with certified hardware designed to withstand extreme weather and dust.

Proven:
Hundreds of deployments and thousands of operational hours around the world.

Complete Support for Widespread Protection

D-Fend's High-Altitude Tactical Kit for EnforceAir is MIL-STD-810G-compliant for temperature range (-30°C - +50°C/ -22°F- +122°C)) and humidity of 95%, designed to withstand weather and dust. EnforceAir High-Altitude Tactical solution has received the Ingress Protection Rating 55 (IP55), which is suitable for outdoor use, with a broad range of environmental conditions that include altitude testing, exposure to high and low temperatures, heavy precipitation, humidity, sand and dust exposure, explosive atmospheres, and gunfire vibration.

Specifications

Electrical Specifications	
Frequency Range	400MHz to 6GHz
Gain	-4dBi – 0dBi @ 433MHz- 6GHz
VSWR	<2.0:1
Vertical Beam Width (-3dB)	±40⁰
Polarization	Omni vertical
Nominal Impedance	50 Ω
Input Power/Power Rating	10W

Mechanical Description	
Dimensions	• Antenna folded: 30 x 30 x 70 cm • Antenna extended: 60 x 60 x 70 cm
Weight	8.5 kg (19 lb)
Constructed from electromagnetic 'clear' material (non-metal) to enable below-horizon radiation pattern	

For more information, please visit: www.d-fendsolutions.com or contact us at: info@d-fendsolutions.com