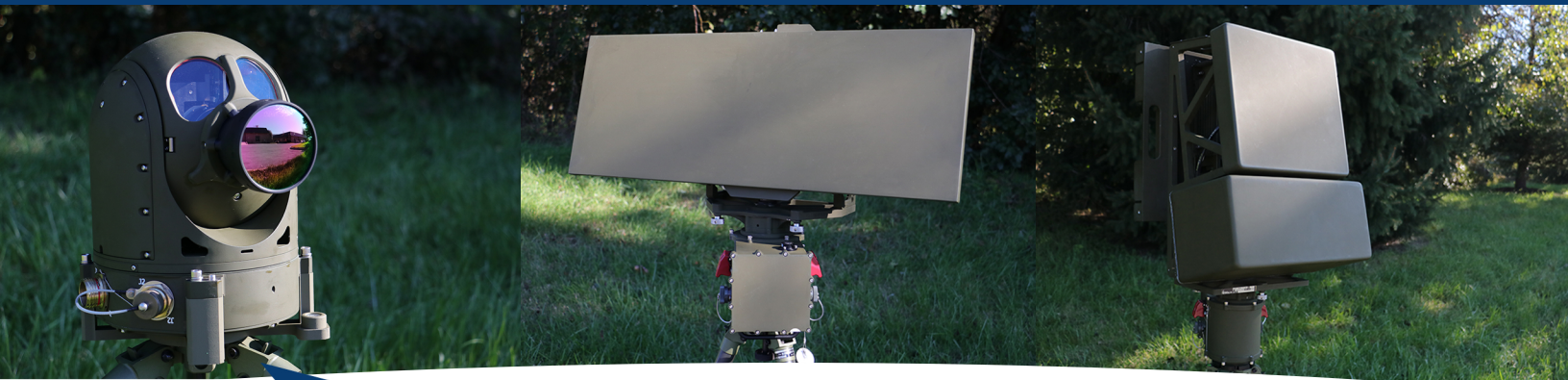


# MAN-PORTABLE ANTI-DRONE SYSTEM KIT

■ MADS-K



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### OBJECTIVE & METHOD:

MADS-K (Man-Portable Anti-Drone System - Kit), a CTTSO program, was designed to provide a modular, man-portable, low-cost, high-performance, efficient, lightweight, dual-purpose ground target (including dismounted personnel and vehicles) and C-sUAS detection system. It achieves those goals due to the tactical integration of three components into one multi-purpose system.

Designed to be simple to train, deploy, operate and maintain, the MADS-K system incorporates a radar, EO/IR camera and jammer that operate in 360 degrees of azimuth and allow for positive target identification at tactically significant ranges. When operating, MADS-K detects, positively identifies and jams sUAS group 1 and 2 target sets command guidance link and GPS receivers.

MADS-K provides the operator with a complete, cost-effective, simple to operate, mission-scalable, man-portable C-sUAS capability.

*Additional options available to increase lethality.*

## CAPABILITY DESCRIPTION

### MARS-K RADAR

#### Air/Ground Surveillance Mode Optimized for C-sUAS

- 360 degrees coverage
- Scan rate: 4 seconds\*
- Targets: 100 simultaneous

*\*Depending on Static or On the Move mode*

#### Detection Ranges

- Detects, tracks and positively IDs sUAS (Rotary/Fixed Wing), Ultralights, dismounted personnel and vehicles at the following ranges:
  - Normal: 250m
  - High-priority target: 140m
- Maximum range determined by: peak power of the transmitted pulse, Pulse Repetition Frequency (PRF) or Pulse Repetition Rate (PRR), and receiver sensitivity

#### Environmental:

- Temperature: -20°C to +50°C

#### Mechanical and Electrical:

- Integrated GPS, ruggedized connectors, Persistent Systems MPU5 Radios, wireless HMI operation and tablet-based C2

### MINI-POP ELECTRO-OPTICAL/ INFRARED (EO/IR) CAMERA

- Designed for Airborne UAV detection
- Thermal and Day color CCD
- Weight: 20 lbs.    ■ Optical-Tracking    ■ 360° azimuth
- ~4km Human recognition range  
~8km Vehicle recognition Range
- Day Camera: 752x576 resolution; 1.7° + 40° field of view  
Night Camera: 480 x 384 resolution; 2° + 22° field of view

### JAMMER / COMJAM

#### Protocols:

- Air / Ground Surveillance Mode    ■ Optimized for C-sUAS
- 360° coverage    ■ Scan rate: 4 seconds\*
- Targets: 100 simultaneous

*\*Depending on Static or On the Move mode*

#### Frequency Bands:

- Common Commercial Bands

#### Capabilities:

- Range – 3-5 Km    ■ Acquisition via downlink channel
- Support Black and White list    ■ Operating from GDU-(C2)
- OMNI directional detection & identification
- Directional jammer    ■ Weight: 44 lbs.
- Coarse DF:
  1. Initiated by RADAR
  2. Independent DF finding - 360° scan