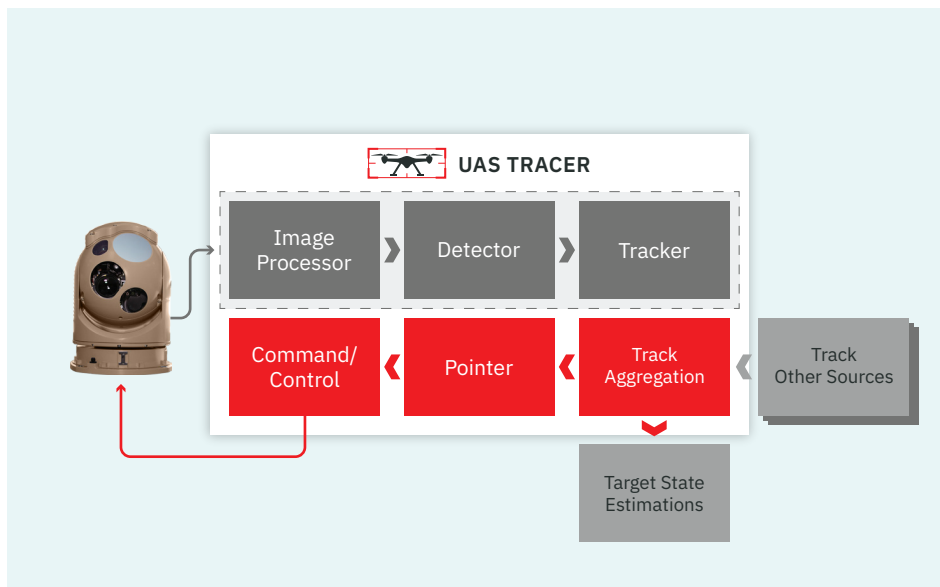![L3Harris® FAST. FORWARD.]

UAS TRACER

Unmanned Aerial System (UAS) Threat Recognition and Counter Enabler (TRACER)

UAS TRACER is designed to perform object detection of a UAS using raw inputs from single or multiple distributed EO/IR sensors. The included track aggregation capability fuses target data from additional, distributed tracking systems from various sources, including but not limited to, EO/IR, radar, RF, and acoustic systems.

The combined detect and track capabilities have been developed in order to provide situational awareness, target acquisition, recognition, and ranging of a wide variety of UAS. The sensor-agnostic track aggregating system delivers UAS target state estimations (TSE) to other users in an overall CUAS solution.

UAS TRACER is capable of interfacing with other TSE users, such as Stores Management Systems (SMS) to enable UAS engagement. It provides an optional remote GUI for operator control and data display. When connected to an L3Harris MX-Series turret, the system offers the capability for Closed-Loop Track (CLT) on a target of interest by automatically pointing the turret to maintain a track on the UAS.

Software-defined, modular, open architecture track aggregating CUAS capability that includes:

> An EO/IR compute capability for image processing, detection and tracking of UAS

> Track aggregation to ingest target tracks from various sources, e.g., radar, RF and acoustic sensors, resulting in TSE

> Pointing and Command & Control (C2) for steerable EO/IR sensors

TYPES OF DETECTORS

> Edge Detection
> Motion Detection
> AI/ML Detection
> Pixel Intensity Detection

TYPES OF TRACKERS AND AGGREGATION

> Relative Motion Tracking
> Unscented Kalman Filtering
> Fusion Tracking
> Rate Deflect Tracking

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