

Mackinaw

Micro Embedded Tracking Solution

Toyon's Mackinaw micro embedded video tracking solution provides complete, industry-leading tracking performance in a compact size

Mackinaw is an all-in-one video tracking solution with a small size, light weight, low power, and rugged design. Mackinaw is an ideal solution for integration into networked mobile platforms of low size, weight, and power such as gimbaled video systems as small as three inches. Although small, Mackinaw is mighty, offering best-in-class target tracking performance, including on unstable platforms.

- 52.5 mm x 28 mm x 12.9 mm, 23 g passively cooled hardware:
 - -40 °C to 85 °C operating temperature
 - Planar end-launch connector IO
- Single high-density locking Samtec connector for external interfaces:
 - Power input: 7 VDC 36 VDC
 - Gigabit Ethernet
 - UART, I2C, and GPIO interfaces for INS and other sensors
- Two 4-lane MIPI CSI-2 camera interfaces via secure locking FPC connectors
- Micro SD and eMMC for onboard video storage
- Software capabilities:
 - Click-to-track correlation tracking
 - Onboard Al models for automatic target recognition
 - H.264 video encoding
 - MISB 0601 video/metadata transport
 - MISB 0903 track data
 - WebRTC 1.0 low-latency video transport
 - HTTP web interface for configuration

DISTRIBUTION STATEMENT A. Approved for public release. The technical Data is ITAR controlled under USML XI-Military Electronics (8) (ii) and Item 12-Category II (d) (1).



Mackinaw top view



Mackinaw side view



Industry-leading target tracking performance

VIDEO PROCESSING FEATURES:

- Click-to-track correlation tracking
- Al-based automatic target recognition (ATR)
- MISB-compliant metadata & track information
- H.264 video encoding and WebRTC transport