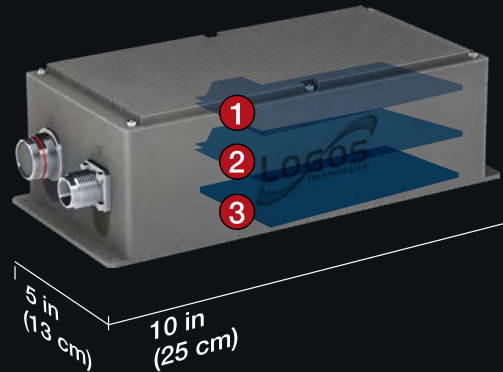




Multi-Modal Edge Processor

ENABLING REAL-TIME ONBOARD PED IN AN ULTRA-LOW SWAP CONFIGURATION



- 1 Processor
- 2 Accelerator
- 3 Storage

Multi-Modal Data Exploitation and Dissemination

Accelerated Data Processing		Storage
ISR Data Source 1	ISR Data Source 2	ISR Data Source 3

1 BILLION PIXELS PER SECOND
< 2 POUNDS
< 50 WATTS

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► HIGH-VOLUME, REAL-TIME DATA PROCESSING

When it comes to processing huge data sets from airborne and space-borne sensors, every second, inch, and ounce counts.

Airborne and space-borne imaging sensors can generate an enormous amount of data. For instance, a 100 Mpx WAMI system operating at 2 Hz generates well over 1 TB per hour. For maximum benefit, all this data should be processed and accessible in real-time. If not, it quickly loses its intelligence value to analysts, operators, and front-edge tactical end-users.

Logos Technologies has developed an ultra-low-SWAP, high-performance computing solution that lets operators process and leverage collected data onboard the aircraft, or spacecraft, in real time, enabling immediate action.

► INCREASED COTS USE FOR SHORTENED ACQUISITION

Designed to meet specific customer needs, our Multi-Modal Edge Processor includes an optimal mix of CPUs, GPUs, FPGAs, and deep learning accelerators combined with custom-tailored software and firmware, for applicability to a wide variety of critical missions. By using COTS components, not only can the latest capabilities be acquired at market cost, our solutions are also able to ride the expanding performance wave provided by industry.

► SMALL ENOUGH FOR GROUP II UAS AND SATELLITES

The result is an ultra-compact, yet powerful, data-processing unit that can be mounted on a wide variety of platforms (including Group II Unmanned Aircraft Systems, and spacecraft) and can transmit critical, real-time intelligence products to tactical operators on the ground.

► REPRESENTATIVE APPLICATIONS

Wide-Area Motion Imagery: up to 1 Billion pixels per second

- Orthorectification
- Single-pixel level, full-scene stabilization
- Real-time, full-scene detection

Hyperspectral Bands: up to 3 Million spectra per second

- Atmospheric compensation
- Real-time anomaly detection
- Real-time material identification

LIDAR Returns: up to 6 Billion points per second

- Real-time FOPEN threat detection
- Real-time 3D model update

► SIZE, WEIGHT, AND POWER

- Size: 253 cu in (4,140 cu cm)
- Weight: 33 oz (940 g)
- Power: 46 W