# Airborne

## Model OSA7

The IDT Os Series Version 3 Airborne Camera comes with 16 GB of integrated DDR and can be configured with up to 1 TB of non-volatile solid-state memory. With a maximum resolution of 1920 x 1280 pixels, the OSA7 can record up to 1,350 fps. Latest CMOS sensor technology produces extremely low-noise images. Support for several sensor platforms deliver various resolutions and frame rates. Power Supply, OS Moutining Plate and Break-out cable for easy out-of-the-box operation are included.

• Solid-state, non-volatile memory
• High dynamic range, low noise

## APPLICATIONS

Airborne, R&D, Industrial

## KEY FEATURES

| | |
|---|---|
| Maximum Resolution | 1920 x 1280 |
| Maximum FPS @ Maximum Res | 1,350 fps |
| Maximum FPS | 42,000 @ 1920 x 16 |
| Streaming Frame Rate | 250 fps |
| Operating Temperature | -40+50 °C / -40+104 °F |

## FRAME PROPERTIES

| | |
|---|---|
| Sensor Type | CMOS – Proprietary |
| Sensor Size | 17.5 x 11.7 mm |
| Sensor Format | 1.3 inch |
| Pixel Size (micron) | 9.12 x 9.12 um |
| Pixel Depth | 12 bit mono 36 bit color |
| Sensitivity | 30,000 ISO Mono, 10,000 ISO Color |
| Min. Exposure Time | 1μs (*Shorter Integration optional) |
| Array | 2.5 megapixel |
| Quantum Efficiency | 1 |

## MECHANICAL

| | |
|---|---|
| Weight | 0.71 kg or 1.56 lbs |
| Dimensions | 86 x 63 x 82 mm (W x H x L) |
| Shock & Vibration | Shock: 200G / Vibration: 40G – All axes |
| Mount | C-Mount (Standard), Manual MFT, F & PL Adapter (Optional) |
| IP Rating | IP54 |

## TRIGGERING AND SYNCHRONIZATION

| | |
|---|---|
| Sync In | Phase-lock TTL, IEEE1588, 1PPS |
| Sync Out | Frame sync / Strobe |
| Trigger | TTL & Switch/Circular buffer with on-camera or software trigger |
| GPS Time Code | Optional |
| HDSDI | Optional |

## POWER

| | |
|---|---|
| Input Voltage | 24 VDC |
| Battery | Optional |

## COMMUNICATION INTERFACE

| | |
|---|---|
| Ethernet | 1000BaseT |

## EMBEDDED LOGIC

| | |
|---|---|
| Debayering | Color Cameras Only |
| Temporal Noise Reduction | Standard |
| User defined ROI's and LUT's | Standard |
| Frame to frame Auto-Exposure and Motion Trigger | Standard |

## IMAGE CAPACITY

| | |
|---|---|
| DDR | 16GB (Standard) – 32GB (Optional) |

## SOFTWARE

| | |
|---|---|
| Motion Studio | Windows 32/64 |
| Motion Inspector | Windows 32/64 – MAC OS X – Apple iOS |
| Plug-ins/SDK | SDK, LabVIEW™ or MatLab® |
| File Formats | Proprietary RAW |
| On-the-fly Conversion | TIF, BMP, JPG, PNG, AVI, MPG, TP2, MOV, MRF, MCF |