

ORION 10.1

AIRBORNE DISPLAY

Space-Saving, Lightweight,
MIL-SPEC, LED Display featuring
Real-Time Enhanced Video



zmicro.com

High Resolution, Compact Display

The Orion 10.1 provides a full 1920x1200 native resolution in a 10.1" LCD. The result is a high resolution, vivid display in a compact mechanical footprint. The Orion 10.1 provides full display performance capabilities while being small enough to fit in space constrained aircrafts.

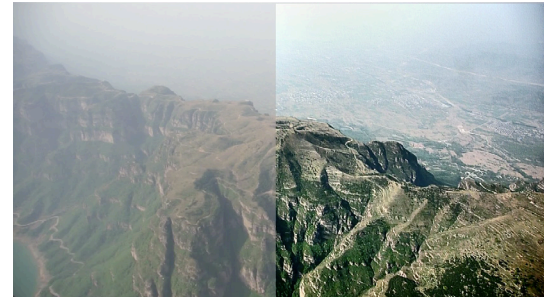
Certified for DO-160 Environments

The Orion 10.1 is built for rugged airborne applications. The display is DO-160G certified with optimal performance in challenging conditions. The MIL-SPEC design handles stringent vibration, shock, temperature, humidity, dust and EMI/EMC environments. MIL-DTL-38999 connectors and protective glass provide optical display clarity and convenience in a robust, small display.

Advanced Video Processing

The Orion 10.1 incorporates ZMicro's WUXGA controller to support MIL-SPEC reliability, high resolution performance, and Real-Time Enhanced Video (RTEV) capabilities. ZMicro's controller can support sophisticated video processing algorithms to provide increased situational awareness in visually degraded environments.

Ideal for Airborne Environments



Instantly enhance image clarity in degraded visual environments with RTEV to see what you've been missing.

HIGHLIGHTS

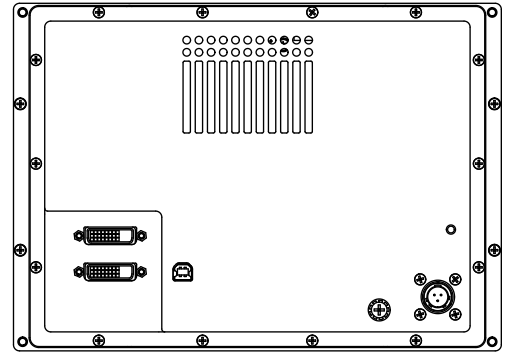
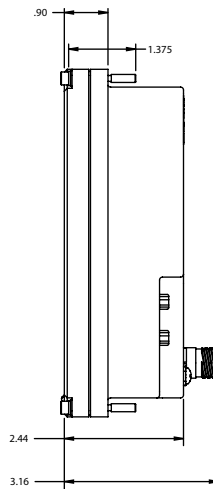
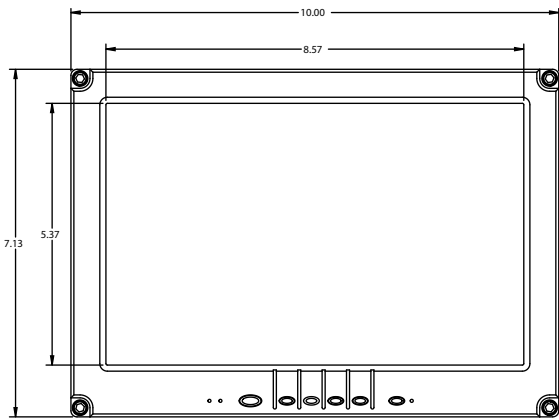
- 10.1" LED LCD
- 1920x1200 (WUXGA) resolution
- Lightweight machined aluminum chassis
- Optically bonded Anti-Reflective shield with EMI protection
- Supports 2 x DVI-D video inputs
- MIL-DTL-38999 connectors for video, USB & power
- USB interface for remote display control via API
- 18-36V DC Power Input
- Real-Time Enhanced Video (RTEV) option for improved visual clarity
- DO-160G certification for rugged airborne applications

FOR MORE INFO

Contact us at sales@zmicro.com
or call 858.831.7000.



MECHANICAL OUTLINE



TECHNICAL SPECIFICATIONS

SIZE & WEIGHT

Dimensions 7.13" H x 10.00" W x 2.44" D
Weight 4.8 lbs.

POWER

Power Supply 18-36V DC, 2.8-1.4 A, 50W Max
Power Consumption 18.3 W

SPECIFICS

Panel Size 10.1" active viewing area
Native Resolution 1920 x 1200
Backlight LED
Brightness 400 nits. Optical coatings will degrade native panel brightness.
Viewing Angle Full +/- 85°
Contrast Ratio 800:1
Aspect Ratio 16:10
Color Palette 16.7 Million
Controls User accessible via Control Panel and API over USB
Display Options Optically bonded AR shield w/EMI mesh, resistive touch panel, embedded RTEV

Scaling Modes No Scale, Fullscreen Scaled, SAR (Scaled w/Aspect Ratio Retained)
Connectors 2x DVI-D, 1x MIL STD 38999 for DC power, USB Type-B
Mounting Console mount with captive screws

ENVIRONMENTAL

Operating Temperature -15° to 55° C
Storage Temperature -40° to +70° C
Humidity DO-160G, Section 6, Cat: A Up to 95% Non-condensing @50° C
Operating Altitude Up to 15,000 ft.
Non-operating Altitude Up to 40,000 ft.
Vibration DO-160G, Section 8, Cat: S Curve M
Shock & Crash Safety DO-160G, Section 7, Cat: B Aircraft Type: All Fixed-Wing Type 4
EMI / EMC DO-160G, Section 21, Cat: L
MTBF Min. 50,000 hrs (backlight only)
MTTR < 30 mins.

OTHER

ESD Safety DO-160G, Section 25, Cat: A 15 kV Air
Quality IPC/ISO 9001:2015 and applicable sections of the MIL-HDBK-454