## **ORION 15.6** AIRBORNE DISPLAY

Rugged, Lightweight, MIL-SPEC, LED Display featuring Real-Time **Enhanced Video** 



zmicro.com

### **High-Performance Display**

The Orion 15.6 brings 1080p resolution to a small compact, rugged display. With its lightweight chassis and low power consumption, the Orion 15.6 is optimal for SWaP sensitive requirements. An optical bonded glass LCD shield helps improves display clarity while providing rugged protection for the LCD.

#### **Designed for Rugged Airborne Environments**

The Orion 15.6 is built for sustained performance in airborne applications. The display is developed for MIL-SPEC environments with rugged design features that ensures safety in ball drop, abusive static load and crash worthiness testing. Advanced DO-160 design provides confidence for sustained performance in demanding airborne installations.

#### Advanced Video Processing

The Orion 15.6 incorporates ZMicro's WUXGA controller to support MIL-SPEC reliability and advanced video processing capabilities. The Orion 15.6 supports picture-in-picture and Real-Time Enhanced Video (RTEV) functionality. RTEV provides sophisticated video processing algorithms to provide increased visual 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**

- 15.6" low powered LED LCD
- 1920x1080 (1080p) resolution
- Lightweight machined aluminum chassis
- Optically bonded resistive touchscreen w/antiglare and EMI
- Supports a single DVI-D video input
- USB interface for remote display control via API &
- 18-36V DC power input w/MIL-DTL-5015 power
- Real-Time Enhanced Video (RTEV) option for improved visual clarity

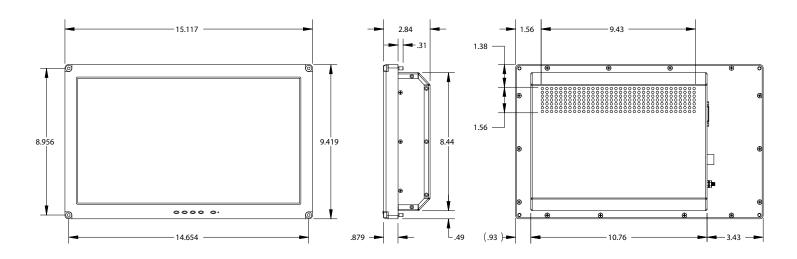
#### FOR MORE INFO

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

# ORION 15.6 AIRBORNE DISPLAY To see all of our display options, visit zmicro.com/displays.



#### **MECHANICAL OUTLINE**



#### TECHNICAL SPECIFICATIONS

**SIZE & WEIGHT** 9.42" H x 15.12" W x 2.84" D **Dimensions** 

Weight 8.5 lbs

**POWER Power Supply** 18-36V DC, 3A, 50W Max Power Consumption 27.7 W

**SPECIFICS** Panel Size 15.6" active viewing area

Native Resolution 1920 x 1080 Backlight LED

Brightness 400 nits. Optical coatings will degrade native panel brightness.

Viewing Angle Horizontal +/- 80°; Vertical +/- 70°

Contrast Ratio 700:1

Aspect Ratio 16:9 Color Palette 16.7 Million

Controls User accessible via Control Panel and API over USB

Optically bonded with Resistive Touchscreen, EMI Mesh, and AG Shield Panel Options Scaling Modes No Scale, Fullscreen Scaled, SAR (Scaled w/Aspect Ratio Retained)

1x DVI-D, 1x MIL-DTL-5015 DC power, 1 x USB Type-B Connectors

Mounting Console mount with captive screws

**ENVIRONMENTAL** -15° to 55° C Operating Temperature

-40° to +70° C Storage Temperature

Humidity DO-160G, Section 6, Cat: A Up to 95% Non-condensing @50° C

Operating Altitude Up to 15,000 ft. Up to 40,000 ft. Non-operating Altitude

Vibration DO-160G, Section 8, Cat: S Curve C

Shock & Crash Safety DO-160G, Section 7, Cat: B Aircraft Type: Fixed Wing Transport

EMI / EMC DO-160G, Section 21, Cat: L

Flammability DO-313, Section 3.9 Glass in Cabin - Ball Drop DO-313, Section 4.2 DO-313. Section 4.2 Glass in Cabin - Static Abuse Load Crashworthiness & Structural Integrity DO-313, Section 3.1.2

**MTBF** Min. 50,000 hrs (backlight only)

MTTR < 30 mins.

**ESD Safety** DO-160G, Section 25 Cat: A 15 kV Air

OTHER Quality IPC/ISO 9001:2015 and applicable sections of the MIL-HDBK-454

ZMicro, Inc. is an ISO 9001:2015 certified company and compliant with AS 9100 requirements. Product information and technical data provided are typical of standard configurations of the described products. Measured results may vary slightly between units. This information is subject to change without notice. For more information, or the latest version of this product sheet, please visit our website @ www.zmicro.com

