

# ORION 15A

## SMART DISPLAY

All-in-One Touchscreen Computer:  
Rugged, Compact, Portable



[zmicro.com/Solutions/All-In-One](https://zmicro.com/Solutions/All-In-One)

## Portable and Compact Single-Board Computer

Combine a 1080p resolution PCAP touchscreen display and an Intel® Core™ SBC and you have a compact and portable all-in-one solution. The smart display gives you the ability to reduce weight and leverage the latest display and computing technology in a compact and rugged package, simplifying your computer and display needs.

## Rugged and Reliable

The Orion Smart Display is designed and tested to meet full MIL-SPEC requirements, creating a reliable and rugged all-in-one display. Tested and passed at +65° C for 120 minutes at operating temperature, the Orion can effectively dissipate heat in a transit case without shutting down. Field reliability is something that you can count on, making interruptions due to electronic failure a headache of the past.

## Harness the Power of Edge Computing in a Compact Chassis

Using an embedded computer, ZMicro has integrated the ability to capture HD-SDI video, with the option of storing data in a removable SD card. The Orion 15A combines video capture and compute capability in a single lightweight, deployable package.

## HIGHLIGHTS

- 11th Gen Intel® Iris® XE graphics with 500GB internal storage and TPM 2.0
- 15.6" low powered LED LCD
- 1920 x1080 (1080p) resolution
- Lightweight machined aluminum chassis
- Ultra-Bright display with optical bonding
- Supports 2x HD-SDI video input & capture with optional M.2 add-in card and software
- PCAP Touchscreen enabled with bare hand or capacitive capable gloved hand
- 12-36V DC power input with MIL-DTL-5015 power connector
- Passed thermal testing at +70° C for 30 minutes at storage and +65° C for 120 minutes at operating
- Easily accessible and replaceable CMOS battery

Ideal for Ground Applications

## FOR MORE INFO

Contact us at [sales@zmicro.com](mailto:sales@zmicro.com)  
or call 858.831.7000.

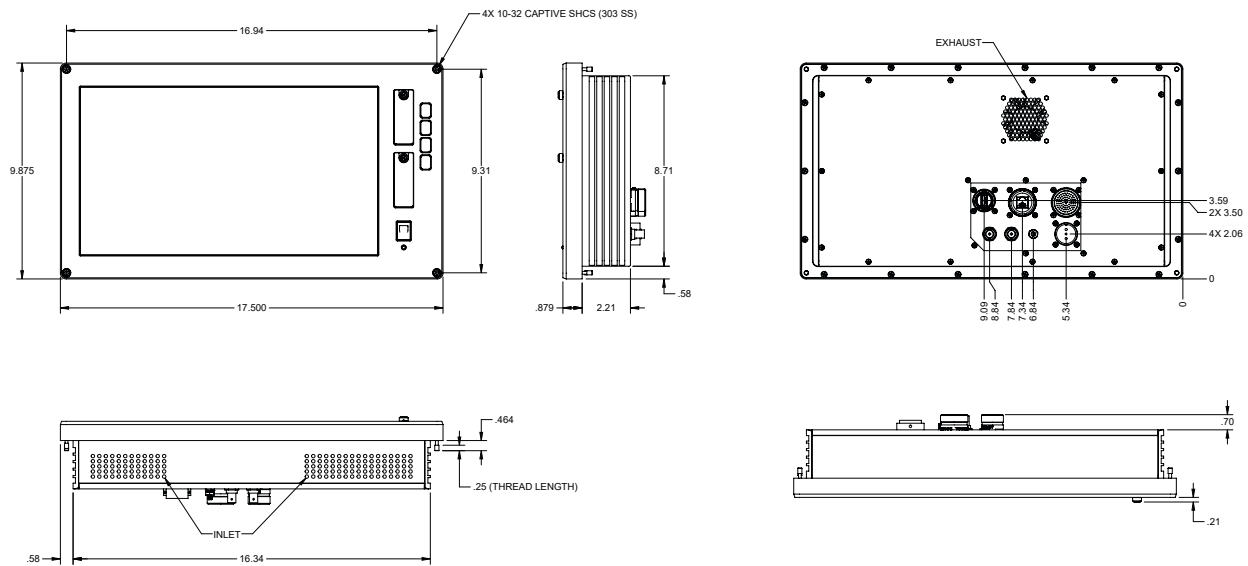
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## ALL IN ONE DISPLAY

To see all of our display options, visit [zmicro.com/displays](http://zmicro.com/displays).



### MECHANICAL OUTLINE



### TECHNICAL SPECIFICATIONS

<b>SIZE &amp; WEIGHT</b>	Dimensions	9.88" H x 17.50" W x 3.79" D
	Weight	12.2 lbs.
<b>POWER</b>	Power Supply	12-36V DC, 14.7-4.9A, 176W Max
	Power Consumption	70 W @ 100% brightness
<b>SPECIFICS</b>	Power Connector	MIL-DTL-5015
	Internal SBC	11th Gen Intel® Iris® XE graphics TPM 2.0
	Internal Storage	500GB NVME
	RAM	16 GB or 32GB options available
	Panel Size	15.6" active viewing area
	Native Resolution	1920 x 1080
	Backlight	LED
	Brightness	1000 cd/m2 (native brightness: may vary due to optical stack bonding)
	Panel Options	Optically bonded PCAP touchscreen usable with bare hand and capacitive capable gloved hand
	Connectors	4x USB 2.0 via MIL connector, 1x USB 3.1 Gen 1 via MIL connector, 1x RS-232 serial port, 1x USB for Maintenance/API Interface, 2x BNCs connectors for HD-SDI, 1x RJ-45 in MIL Shell
	Font Display Features	Removable SD Card slot, replaceable CMOS battery
	Mounting	Corner mount with captive screws
	Lag Time	> 25 ms
<b>ENVIRONMENTAL</b>	Operating Temperature	-20° to +65° C for 120 minutes*
	Storage Temperature	-30° to +70° C for 30 minutes*
	Humidity	MIL-STD-810G, Method 507.5, Procedure II*
	Operating Altitude	Up to 10,000 ft. MIL-STD-810G, Method 500.5, Procedure II*
	Non-operating Altitude	Up to 40,000 ft. MIL-STD-810G, Method 500.5, Procedure I*
	Vibration	MIL-STD-810G, Method 514.6, Procedure I*
	Shock & Crash Safety	MIL-STD-810G, 30gs, 11ms, saw-tooth, Procedure I: Functional Shock*
	EMI / EMC	MIL-STD-461G: Radiated: RE101 (Army Limits), RE102 (Aircraft > 25m), RS101, RS103 (up to 60V/m). Conducted: CE101 (Curve #2), CE102, CS101, CS114 (Aircraft 10kHz-200MHz), CS115, CS116, CS118
<b>OTHER</b>	Quality	AS9100:2016 and IPC/ISO 9001:2015 and applicable sections of the MIL-HDBK-454

\* ZMicro's products are designed to meet or exceed environmental specifications. Test results are configuration dependent. For specific test results, please contact your sales representative.

ZMicro, Inc. is an AS9100:2016 & ISO 9001:2015 certified company. 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](http://www.zmicro.com).