# RUGGED

### **MilCortex 20.1" OPERATOR INTERFACE PANEL**





#### **ABOUT**

The 20.1" MILCORTEX OIP, Operator Interface Panel, is designed for tough environments, and feature an innovative and cost-effective "box-in-box" design. The OIP is powered by a Rugged Science MILCORTEX Series Embedded Computer, which is internally mounted within the OIP enclosure. This "box-in-box" design keeps price and obsolescence issues in check.

The MILCORTEX Series embedded computer is powered by Intel® Xeon Core i7/ i5/ i3/ Skylake/Kaby Lake processors and a maximum 32GB RAM. They come with 2 Copper LANs standard, and can be configured for 2 Fiber Ethernet LANs (optional).

The aluminum chassis of the 20.1" MILCORTEX OIP doubles as a heat sink to passively disperse heat to the ambient environment. The 20.1" MILCORTEX Operator Interface Panel features a 20.1" LED backlit display with 1600 x 1200 resolution, a 4:3 aspect ratio, and 300 nits standard brightness for a clear and sharp display.

#### **FEATURES**

- Rugged solid state fanless design
- Quad Core Intel® Xeon® or Core™ i7/i5/i3 CPUs (Skylake/Kaby Lake)
- Ideal for automated status board & shipboard thin-client machinery control applications
- 20.1" 5-Wire 1600x1200 Touchscreen Display
- Up to 32 GB RAM
- SSD Expandability
- Optional Fiber LAN
- Military Qualified:
  MIL-STD-901D Shock
  MIL-STD-461F Vibration
  MIL-STD-167-1A EMI

## MilCortex 20.1" OIP TECHNICAL SPECIFICATIONS

#### **System**

Rugged Science MILCORTEX 3000 Series Internal Embedded Computer

Processor Quad Core Intel® Xeon® or Core™ i7/i5/i3 CPUs (Skylake/Kaby Lake)

Chipset Intel® C236

2x DDR4 2133MHz SO-DIMM, up to 32GB Memory

I/O Interface

External I/O Configurable to match embedded computer I/O

Inline Mouse Sealed USB inline pointing device on front bezel

**OSD Brightness Control** 4-button control and OSD menu

**Ethernet** 

100 Base FX Fiber LAN via ST connector Fiber LAN

(FIber Gigabit Ethernet option also available)

**Graphics & Video** 

**Display Size** 20.1" diagonal viewing area, 5W resistive touch w/ 2.8mm glass

Resolution 1600 x 1200

4:3 Aspect Ratio

LED backlit **Backlight Brightness** 300 nits

Colors 16.7M Colors (24bit)

**Contrast Ratio** 5000:1

Storage SATA

(2) SATA III (6Gbps)

**mSATA** SATA III (Mini PCle Type, 6Gbps)

**Expansion** 

SUMIT (2) SATA III (6Gbps)

SATA III (Mini PCle Type, 6Gbps) Mini PCle

Power

Input Voltage 120-Volt AC

**Audio** 

Realtek ALC892, 5.1 channel HD audio with 93 dB speaker Codec

Line-out, Mic-in, Front audio header

Mechanical

Size (W x D x H) 648mm x 180mm x 457mm (25.5" x 7.09" x 18")

43.3 lbs. (without bracket) 49.1 lbs. (with bracket) Weight

Aluminum chassis and enclosure Design

**Environmental** 

**Operating Temperature** -20°C to 60°C (-4°F to 140°F)

-20°C to 85°C (-4°F to 185°F) Storage Temperature

Humidity 0 to 95%

Additional

**Trusted Mobile Platform** Infineon SLB9635, LPC Interface (Optional)

**Watchdog Timer** Reset: 1 to 255 sec / min Per Step

**Designed to Meet** 

MIL-STD-901D, Grade A Shock

**EMI** MIL-STD-461G Vibration MIL-STD-167-1A

Power MIL-STD-1399

Our 20.1-inch OIP features a MILCORTEX 3000 Series embedded computer with an Intel® Core processor and up to 32Gb RAM.

