MILSYNAPSE 19"
OPERATOR INTERFACE PANEL

OVERVIEW

The Rugged Science 19" MILSYNAPSE 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 MILSYNAPSE 3000 Series Embedded Computer, which is internally mounted within the OIP enclosure. This "box-in-a-box" design keeps price and obsolescence issues in check.

MILSYNAPSE 3000 Series embedded computers are powered by an Intel® Core™ i7/ i5/ i3/ Celeron® U-series Processor (Skylake-U, up to 4M Cache, 3.4GHz). This guarantees hardware support for seven years from the date of release.

The aluminum chassis of the 19" MILSYNAPSE OIP doubles as a heat sink to passively disperse heat to the ambient environment. The 19" MILSYNAPSE Operator Interface Panel features a 19" LED-backlit display with 1280 x 1024 resolution, a 5:4 aspect ratio, and 250 nits standard brightness for a clear and sharp display. An AC power connector kit is available.

FEATURES

- **Rugged solid state fanless design**
- **Intel® Core™ i7/ i5/ i3/ Celeron® U-series Processor (Skylake-U, up to 4M Cache, 3.4GHz)**
- **Ideal for automated status board & shipboard thin-client machinery control applications**
- **Up to 16GB RAM**
- **Fiber I/O (single iber SC)**
- **Fiber connector kit (optional)**
- **AC power connector kit (optional)**
- **On-board Media Converter**

MILSYNAPSE 19"
SPECIFICATIONS

System

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Internal Embedded Computer	Rugged Science MILSYNAPSE 3000 Series
Processor	Intel®Core™ i7/i5/i3/ Celeron® U-Series Processor (Skylake-U, up to 4M Cache, 3.4GHz)
Chipset	Intel® SoC (Skylake)
Memory	(1) DDR4 2133MHz SO-DIMM, up to 16GB

I/O Interface

External I/O	Configurable to match embedded computer I/O
In-Line Mouse	Sealed USB in-line pointing device on front bezel
OSD Brightness Control	4-button control and OSD menu

Ethernet

Fiber LAN	100 Base FX Fiber LAN via ST connector (Fiber Gigabit Ethernet option also available)

Graphics & Video

Display Size	19" diagonal viewing area
Resolution	1280 x 1024
Aspect Ratio	5:4
Backlight	LED backlit
Graphics Chipset	Intel® HD Graphics 520
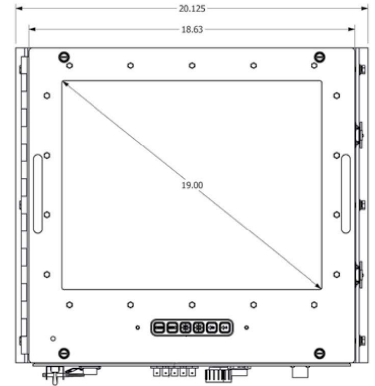
Storage

SATA	(2) SATA III (6Gbps)
mSATA	SATA III (Mini PCIe Type, 6Gbps)

Expansion

SUMIT	SUMIT A&B Connector
Mini PCIe	(2) Mini PCIe
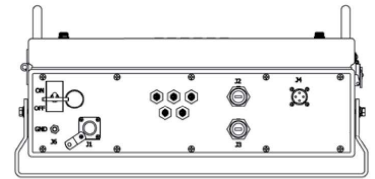
Power

Input Voltage	120-Vot AC

Audio

Codec	Realtek ALC892, 5.1 channel HD audio with 93 dB speaker Line-out, Mic-in, Front audio header

Mechanical

Size (W x D x H)	473mm x 457mm x 200mm (18.63" x 18.0" x 7.86")
Weight	43.3 lbs. (without bracket), 49.1 lbs. (with bracket)
Design	Aluminum chassis/Steel enclosure

Ennvironmental

Operating Temperature	0^0C to 50^0C (32^0F to 122^0F)
Storage Temperature	-25^0C to 85^0C (-13^0F to 185^0F)

Additional

Trusted Mobile Platform	Infineon SLB9635, LPC Interface (Optional)
Watchdog Timer	Reset: 1 to 255 sec/min Per Step

Designed to Meet

Shock	MIL-STD-901D
EMI	MIL-STD-461F
Vibration	MIL-STD-167-1A