MILAXON 2000 OPERATOR INTERFACE PANELS

ABOUT

Our MILAXON OIPs (Operator Interface Panels) are designed for tough environments, and feature an innovative and cost-effective "box-in-box" design. The OIP is powered by a Rugged Science MILAXON 2000 Series Embedded Computer, which is internally mounted within the OIP enclosure. This "box-in-box" design keeps price and obsolescence issues in check.

MILAXON Series embedded computers are powered by 5th Gen Intel® SoC Broadwell-U processors and a maximum 16 Gb RAM. They come with 2 Copper LANs standard, and can be configured for 2 Fiber Ethernet LANs (optional).

The aluminum chassis of MILAXON Series OIPs doubles as a heat sink to passively disperse heat to the ambient environment. The MILAXON Series Operator Interface Panels features a 19-inch LED backlit displays with 1280 x 1024 resolution, a 4:3 aspect ratio, and 250 nits standard brightness for a clear and sharp display.

FEATURES

- ■ **5th Generation Intel® SoC (Broadwell-U)**
- ■ **Supports 4K Resolution, up to 3 independent displays**
- ■ **Fanless, -25°C to 70°C Operating Temperature**
- ■ **2 Gigabit LAN**
- ■ **2 Front-Access SSD/HDD Tray**
- ■ **2 Mini PCIe support 3G/4G/LTE/WiFi/GPRS/ UMTS**
- ■ **2 External SIM Cards**
- ■ **16 DIO: 8 digital In, 8 digital Out**
- ■ **Configurable Ignition Power Control**
- ■ **Military Qualified:**
    - **MIL-STD-901D Shock**
    - **MIL-STD-461F Vibration**
    - **MIL-STD-167-1A EMI**

RUGGED SCIENCE

System

Internal Embedded Computer	MILAXON 2000 Series
Processor	5th Gen Intel® Core™ i7, I5, I3 series Quad-Core processors (Broadwell-H)
Chipset	Intel® Mobile QM87
BIOS	AMI
Memory	16GB Max., 2 204-pin SO-DIMM Socket DDR3 1066 | 1333 | 1600 MHz, DDR3L 1066 | 1333 MHz

External I/O

Serial Interface	3 COM RS-232, 1 COM RS-232 / 485 / 422
USB	4 External USB (4 USB 3.0 or 2 USB3.0+2 USB2.0)
Inline Mouse	Sealed USB inline pointing device on front bezel
OSD Brightness Control	Four button Screen Brightness Control and OSD Menu
Isolated Digital I/O	8 Digital Input, 8 Digital Output
PS/2 (optional)	PS/2 keyboard & mouse
Touchscreen	5-wire Resistive Touch (standard) Optional: Capacitive, IR, SAW

Ethernet

Copper LAN 1	1 Intel® 82579LM Gigabit LAN, Wake on LAN, PXE Support ; Intel® AMT 8.0
Copper LAN 2	1 Intel® 82574L Gigabit LAN, Wake on LAN, PXE Support
Fiber LAN 1, 2 (optional)	2 100 Base FX Fiber LAN via commercial ST connector (FIber Gigabit Ethernet option via SFP Module also available)

Expansion

Mini-PCIe	1x Mini PCIe socket (PCIe + USB + SIM card socket)
	1x miniPCIe socket (PCIe +USB), compatible with mSATA

Graphics, Video & Audio

Display Size	19-inch Diagonal Viewing Area
Resolution/Aspect	1280 x 1024 resolution, 4:3 Aspect ratio
Backlight	LED-backlit
Graphics Chipset	Intel® GMA HD 4000
Display Memory	Shared Memory, Up to 1.7GB
Display Interfaces	DB-15 VGA / 1920 x 1200 Max. DVI-D | 1920 x 1200 Max.
Display Port 1	2560 x 1600 Max.
Display Port 2	1920 x 1200 Max.
LVDS	Dual Channel 24-bit | 1920 x 1200 Max.
Audio	Realtek ALC892, 5.1 Channel HD Audio with 93 dB Speaker Line-out, Mic-in, Front Audio Header

Power

Power Input	90-264 VAC, 60Hz, 1 Ø via MIL-Circular Power Connector

Storage

SATA	2 SATA III 6Gbps, 1 SATA II 3Gbps DOM
Storage Expansion	CFast Slot - Push In/Out Ejector

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)
Chassis	0.125" Aluminum Alloy 5052-H32 chemically treated IAW MIL-DTL-5541, Type II, Class 1A

Environmental

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

Additional

Trusted Mobile Platform	Infineon SLB9635, LPC Interface (Optional)
Watchdog Timer	Reset: 1 to 255 sec / min Per Step
HW Monitor	Temperature | Voltages Auto Throttling Control When CPU Overheats

Designed to Meet

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