GE Intelligent Platforms

Wolverine III

Rugged, field serviceable, sunlight-readable ATEX Zone 2 flat panel computer

GE Intelligent Platform’s Wolverine III is a rugged flat panel computer engineered to deliver the utmost performance, at all times, under any condition.

Leveraging our considerable experience as a leading provider of rugged computing products, Wolverine III is designed specifically to withstand the rigors of deployment in harsh, hazardous (HAZLOC) applications such as oil and gas exploration and production where salt, spray, dust, shock, vibration and extremes of temperature provide the most challenging environments for computers. GE crafted Wolverine III for data gathering and the control or operation of sophisticated equipment, making it ideal for Human Machine Interfaces (HMIs) or Operator Interfaces in Zone 2 hazardous areas.

**Innovative**
GE’s Wolverine III raises the bar for ATEX Zone 2 and C1D2-rated rugged panel PCs. It weighs less than 23lbs without compromising ruggedization, and operates reliably in temperatures from -40° to +60°C. The modular design is easy to upgrade, and sets a new standard for field serviceability.

**Reliable**
GE understands that rugged reliability is a fundamental requirement for PCs deployed in harsh environments. To that end, we used as few components and sub-assemblies as possible, together with extensive edge connection and solid-state disk drive technology to maximize reliability.

**Field Serviceable**
While designing the Wolverine III, we embraced the ATEX Zone 2 concept of user-serviceability to deliver shorter Mean Time-To-Repair (MTTR) by using a highly modular construction that makes repairs easy and quick to minimize downtime. We also built in extensive onboard system monitoring for early impending failure detection, thus minimizing the potential for operation disruption.

**Upgradeable**
Wolverine leverages GE’s unique ruggedized COM Express plus carrier computing architecture to provide latest-generation computing power suitable for harsh environments. The COM Express architecture separates the processor and carrier card to extend the useful life and reduce the total cost of ownership of the subsystem by allowing a cost-effective upgrade of the COM Express module alone.

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| Wide temperature range (-40° C to +60° C) with fast turn-on at -20° C | • System warms in 2 minutes for fast start at -20° C  
• Single asset deployable in a wide range of geographic areas |
| Light weight: 22.5lbs (10.2kg) | • Fewer people required to transport and install Wolverine III than heavier systems  
• Less than 50% of the maximum lifting weight recommended by NIOSH (www.cdc.gov/niosh/) |
| High-performance Intel Core 2 Duo processor | • More processing horsepower for faster application response |
| Onboard system diagnostics for temperature, power-on hours and acceleration | • Enables you to gather data to perform preventive maintenance and set system alarms to ensure the computer stays up and running |
| Field-replaceable SATA solid-state hard drive | • Add a higher capacity hard drive, if needed, at the deployment site  
• Solid-state technology provides reliable data storage with very high immunity to shock and vibration |
Wolverine III

Specifications

Display/User Interface
- 15” XGA, 1024x768, 16.2M color AMTFT LCD; sunlight readable with LED backlight
- 5-wire resistive touchscreen with anti-glare and scratch resistant coating
- Bezel options with LED/button configurations
  - Blank front
  - Power/Clean/Brightness buttons
  - Power/Clean/Brightness buttons with F1-F12 buttons

Viewing Area
- 9” (H) x 12” (W), 15” diagonal
- 229 mm x 305 mm

CPU
- Soldered Intel® Core™ 2 Duo (up to 2.26GHz)

Memory
- Soldered non-ECC DDR3 SDRAM (up to 4GB)

Chipset
- Intel® GS45 Express chipset
- Intel® 82801IUX I/O Controller Hub (ICH9M SFF)

BIOS
- AMI system BIOS
- Supports Soft off, Wake on LAN, RTC alarm Power On
- Power on after power failure

Expansion Slot
- Express Card (33mm and 54mm modules)

I/O
- 4x USB 2.0 ports (1 IS port on IOP cover standard)
- 4x serial ports (2x optically protected RS-232, 2x RS-232/422/485)
- 2x Gigabit Ethernet ports
  - Supports Boot from LAN (PXIE)
  - Supports Wake on LAN when 5V standby power is available
  - 2x RJ45 (via IOP cover)
- 1x VGA out

I/O Cover
- Conduit cover with glands to seal I/O connections

Storage
- 1x SATA hard disk drive, field removable
- 32GB solid-state hard drive (standard)
- 16/64GB solid-state hard drive (optional)
- 100GB rotating hard drive (optional)

System Diagnostics
- Internal temperature
- Accelerometer
- Power-on hours

Mount
- Rear mount (standard)
- Panel mount (optional)
- Yoke mount (optional)

Power
- 85W (nominal), 200W max while heating

Input Voltage
- 11-32 VDC or
- 100-240 VAC auto-ranging, 47-63Hz

Dimensions (HxWxD)
- 13.75” x 15.9” x 5.02”
- 349mm x 408mm x 98mm (144mm with IOP cover)

Weight
- 22.5lbs, 10.2kg

Environmental
- -40° to +60°C (operating)
- -40° to +70°C (storage)

Shock
- 40G pulse (per MIL-STD-810E)

Vibration
- Hard Drive: 1G, 8 - 500Hz, 3 axes
- Solid-State: 2G, 5 - 500Hz, 3 axes

O/S Compatibility
- Microsoft® Windows® XP, Windows 7, Linux

Compliance
- CE
- ATEX Zone 2
- C1D2
- NEMA 4x
- IP66
- FCC Subpart B Class A

About GE Intelligent Platforms

GE Intelligent Platforms is a division of GE that offers software, control systems, services, and expertise in automation and embedded computing. We offer a unique foundation of agile and reliable technology providing customers a sustainable competitive advantage in the industries they serve, including energy, water, consumer packaged goods, oil and gas, government and defense, and telecommunications. GE Intelligent Platforms is headquartered in Charlottesville, VA. For more information, visit www.ge-ip.com.

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