# HP and EIZO Geospatial Intelligence Solutions



Geospatial professionals gain a significant edge in performance and productivity, thanks to the combination of HP Workstations and monitors from EIZO.

HP recommends Windows.



# Increase productivity with HP Workstations

Globally used within government agencies and among geospatial professionals, HP Workstations deliver the needed processing power, accelerated and reliable performance, and expandability for analyzing and managing your large geospatial data sets. HP Workstations give you an edge in five key areas:

# Speed

From disaster response and recovery to decision-making during missions, speed and accuracy are essential. HP Z Workstations have been designed to make every second count, through greater productivity. HP Workstations high performance I/O sub-systems rapidly ingest large imagery and GeoInt data files ensuring data accuracy throughout the workflow.

# Performance

Advanced computing and visualization allow you to yield faster results, greater precision, and ultimately provide better results. At the heart of HP Z Workstations are the latest Intel<sup>®</sup> Xeon<sup>®</sup> processors—including Intel<sup>®</sup> QuickPath technology, advanced Intel<sup>®</sup> Turbo Boost technology, and Intel<sup>®</sup> Hyper-Threading—to give you maximum performance and speed even when performing multiple tasks at once. You will also benefit from HP Liquid Cooling. HP is reengineering the sound of high performance, leading the workstation industry with acoustical innovations and thermal efficiencies that are designed to deliver advanced performance with a whisper-quiet and more productive workplace experience.

# Reliability

HP Workstations are tested for durability and thermal testing, and HP ZBook Mobile Workstations are tested to meet MIL-STD-810G for operation shock, vibration, dust, and altitude.<sup>1</sup> Additionally, HP works with industry software vendors to test and validate application performance, and proper configuration. You can be confident in the reliability of your HP and EIZO solution for your most mission-critical tasks.

# Expandability

HP Workstations make it easy to add memory and processing power to give you optimal performance as your data sets grow in complexity and size. With a tool-less chassis you can scale your system to meet any needs for storage, graphics power, and multiple displays.



# **Suggested configurations**

# Geospatial Analysis – Roam & 3D





HP Z620 Workstation Windows 8 64-bit Two 10-core Intel<sup>®</sup> Xeon<sup>®</sup> Processor E5-2690v2 (3.0 GHz) Nvidia Quadro K5000 graphics Two 2TB SATA 7200rpm RAID0 hard drives 32 GB DDR4 ECC memory

#### EIZO® DuraVision FDF2405W

23.5" diagonal LED backlight color display 1920 x 1080 resolution 240Hz processing for fast roam

# **Mapping & GIS**



### HP Z230 Tower Workstation

Windows 8 64-bit 4-core Intel<sup>®</sup> Xeon<sup>®</sup> Processor E3-1280v2 (3.6 GHz) Nvidia Quadro K4000 graphics 500 GB SATA 10Krpm SFF hard drive 16 GB DDR4 ECC memory

#### EIZO® DuraVision FDH3601

36.4" diagonal LED backlight color display 4k resolution (4096 x 2160) Digital Uniformity Equalizer

# **Geospatial Analysis - Primary**



#### HP Z420 Workstation Windows 8 64-bit

Wildows 8 64-bit 8-core Intel<sup>®</sup> Xeon<sup>®</sup> Processor E5-2650v2 (2.6 GHz) Nvidia Quadro K4000 graphics Two 2 TB SATA 7200rpm RAID0 hard drives 16 GB DDR4 ECC memory

#### EIZO® RadiForce MX270W

27" diagonal color LCD monitor 2560 x 1440 resolution Internal calibration and sharp image detailing

# **EIZO monitors for reliability and stability**

## The HP and EIZO advantage

HP has a unique relationship with EIZO, working as one of its top hardware partners. This allows HP and EIZO to offer a comprehensive portfolio of solutions that address the needs of our customers with innovative hardware and software that is tuned and integrated. Our close relationship and geospatial expertise help ensure solutions that perform not only today, but for the long run.

### Quality and innovation in high end imaging

EIZO has decades of expertise designing monitors that show all the subtle nuances in images and EIZO brings that expertise into the geospatial arena with monitors ideal for 24/7 usage. When looking for accuracy and clarity in your geospatial images, count on EIZO to deliver motion performance exceeding that of former CRT technology. The precise factory and internal calibrations and exceptionally long life of the monitors ensure you won't miss a single detail in your images.

#### EIZO lowers your total cost of ownership

Government agencies are focused on lowering overall costs and EIZO supports this objective with LED backlit monitors. This extends the product lifetime, lowers utility expenditures through improved power consumption, and provides a more environmentally friendly disposal than earlier options. With EIZO's unique implementation of these backlights, users enjoy images with more consistent brightest, uniformity, and accuracy than ever before all while ensuring replacement of monitors far less frequently than ever before.

## Performance that makes a difference in your environment

All EIZO products offer robust performance and a high degree of mounting and housing flexibility for government, traffic control, and geospatial applications. The DuraVision FDF2405W monitor converts 120 Hz input signals to 240 Hz to reduce ghosting and blurring caused during frame changes. This greatly improves sharpness and visibility and reduces eye fatigue while viewing, scrolling or moving images. Defined by the National Geospatial Intelligence Agency, EPD (Equal Probability of Detection) Gamma Curve displays subtle variations in tones more clearly in undefined areas and distinguishes flat terrain in satellite images. The EPD preset mode ensures each gradient step between black and white is detected and defines objects and details that would otherwise remain difficult to see.

## Moving into the next generation of imaging

EIZO achieves blur free roam on an LCD display, which now allows an upgrade for users who remained loyal to CRT monitors due to the quality concerns of LCDs. The DuraVision FDF2405W supports 3D stereo imaging applications and has a unique drive system that exceeds other standard LCDs, motion performance. With this new monitor, users can enjoy fast motion, long life, and 3D support all in one. This quality is backed by a warranty defining 24/7 operations.

# **HP Advantages for EIZO customers**

#### Use HP expert knowledge

- HP technical experts work daily with HP/EIZO solutions. They support customer issues, develop
  recommended configurations, run performance testing, and analyze application performance.
- HP technical knowledge goes into HP Performance Advisor to give customers the best workstation settings for individual applications.
- HP Workstation Tech Tips are available to help customers understand how to benefit from specific HP and partner technologies running on HP Workstations.

#### **Use HP collaboration tools**

 HP Remote Graphics Software provides exceptional performance for 3D remote desktop usage, and for sharing your desktop with others.

#### **Use what EIZO uses**

• EIZO has standardized the use of HP Desktop and Mobile Workstations to develop, test, and demonstrate their software.

#### Protect your investment with HP certification

 HP tests and then submits HP Workstations to EIZO for full testing and certification, and we leave our equipment onsite at EIZO. This protects your software/hardware investment in areas of solution quality and HP/EIZO solution support.



# HP Z Workstations for your geospatial intelligence environment

HP Z Workstations	
HP Z230 Tower and HP Z230 SFF Workstation	Affordable performance and flexibility, re-defined. >> Create a totally immersive work environment for those who demand reliability and performance on a budget. Designed for heavy 24x7x365 workloads, the HP Z230 delivers next-generation processor and graphics technologies in two all new, redesigned chassis- a new compact yet impressively expandable Tower and a surprisingly capable Small Form Factor.
HP Z420	Performance you want. Value you need. >> The HP Z420 Workstation gives you professional expandability in an accessible tool-free mini-tower form factor—all at a great price. With up to eight discrete processor cores, the latest processing and I/O power from Intel, and the latest graphics technology from leading graphics providers, you have the power you need to get the job done.
HP Z620	Our most versatile workstation ever. >> With up to 16 discrete processor cores, the HP Z620 Workstation packs a ton of computing and visualization power into a quiet, compact footprint. New features include next-generation Intel® Xeon® processor E5-2600 family <sup>2</sup> enhanced graphics, and greater I/O expandability.
HP Z820	Our ultimate workstation. >> Built for high-end computing and visualization, the dual-processor HP Z820 Workstation delivers outstanding performance, award-winning industrial design, and tool-free serviceability in the industry's most expandable chassis. With next-generation Intel® Xeon® processors, support for up to 16 processing cores, and the latest professional graphics, you'll tackle even the most demanding projects like never before.
HP ZBook 14	<u>World's first workstation Ultrabook™.<sup>3</sup> &gt;&gt;</u> Everything you'd expect from the claim of the world's first workstation UltraBook™. <sup>3</sup> HP's thinnest and lightest ZBook 14 Workstation Ultrabook™ <sup>3</sup> utilizes impressive professional 3D graphics. This superbly thin, customizable workstation is light enough to carry when you're on the go—and powerful and reliable enough to carry you through the workday.
HP ZBook 15 and ZBook 17	Designed to perform. >> Break free from your desktop with a sleek new HP ZBook 15 and ZBook 17 Mobile Workstation that keeps you productive in the office, client meetings, and on the go. Take advantage of HP's powerful processing and graphics, consistent color throughout your workflow with HP DreamColor, simple scalability, and the blazing-fast connectivity your team needs to perform and collaborate at the speed of creativity. Take advantage of powerful processing and graphics, consistent color throughout your workflow, simple scalability, and the blazing-fast connectivity your team needs to perform and collaborate at the speed of creativity.

# **HP Workstation innovation highlights**

HP award-winning Workstations are rich with customer-driven innovations. Servicing is easy with a tool-less access chassis and modular, direct-connect drives and power supplies on select models.

HP Performance Advisor	The built-in workstation guru. >> HP Performance Advisor delivers a simple, effective way to keep your HP Workstation operating at its peak potential. Like having an IT pro always on hand, this helpful software wizard can take you from initial configuration and customization through the optimization of your system for each new application and driver you install.
Remote Graphics Software	Remote access with a "just like local" feel. >> HP Remote Graphics Software gives you high-performance remote desktop access to your 2D, 3D, video, and media-rich applications— when and where you need them, on-site or from a remote location through a standard Internet connection. This HP innovation allows you to collaborate with colleagues across geographies, in real-time, using content-rich interactive applications.
HP SpacePilot	SpacePilot Intelligent Controller enables two-handed operation with one hand on the mouse and one on the HP SpacePilot. This device is well-suited for 3D and volumetric image manipulation.

## Learn more at

#### hp.com/go/gis and hp.com/zworkstations

- 1. MIL STD 810G testing was not intended to demonstrate fitness for U.S. Department of Defense contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions.
- Multi-Core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. 64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel® 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. Intel's numbering is not a measurement of higher performance.
- 3. Not all configurations qualify as a workstation Ultrabook™.

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