Z420 EE Management Workstation

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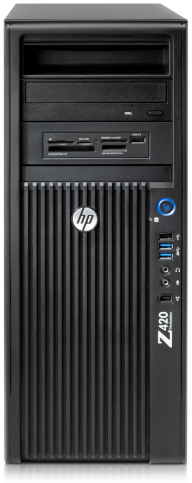

- Highest-performance workstation with Intel's latest-generation microarchitecture
- Four-monitor support (AMD FirePro W7000, 4 GB graphics card)
- Silent running with HP liquid cooling solution
- Protected by HP Services, including a 3 years Next Business Day on-site support

This HP Z420 management workstation with its latest processing and I/O power from Intel, and the latest graphics technology from leading graphics providers is designed for video-oriented applications that require high performance and most advanced visualization.
HP Z420 features a smart chassis that offers tool-less access to the inside and easy configurability for seamless deployment. And with liquid cooling designed to deliver whisper-quiet performance, HP Z420 is built to minimizing power and cooling costs with ENERGY STAR qualified configurations featuring 90% efficient power supplies while taking on bigger computing challenges with the new Intel vPro technology and the latest Intel Xeon six-core processor:

- Intel Xeon E5-1650 v2 (3.5 GHz, 12 MB cache, 1866 MHz memory speed, Six-Core, HT, Turbo)
- 8 GB (4 x 2 GB) DDR3-1600 ECC unbuffered RAM

HP Z420 is a workstation solution based on the Intel C602 Chipset using Intel's vPro technology and on 8 DIMM slots in 4-channel memory architecture.
With 2 x PCI Express Gen3 x16 mechanical/electrical, 1 x PCI Express Gen3 x8 mechanical/electrical, 1 x PCI Express Gen2 x8 mechanical/x4 electrical, 1 x PCI Express Gen2 x4 mechanical/x1 electrical and 1 x Legacy PCI, HP Z420 delivers high performance bandwidth interfaces and future expandability:

- The architecture of this management workstation delivers next generation I/O throughput to handle future high throughput and visualization requirements.
- The ultra high-end AMD FirePro W7000 (4 GB, 4 x display ports) 3D graphics card ensures highest performance and resolution for fast presentation of displayed video data.

The convertible minitower chassis allows for Minitower or Desktop orientation.

System overview

Z420 EE Management Workstation is the highest-performance workstation suitable for running the security systems software applications offered by Bosch.
Please refer to the respective application data sheets to get detailed information.
Intel Microarchitecture offers the latest in processor innovation, including:

- Design and performance scalability with Intel Hyper-Threading Technology (Intel HT Technology), scalable cache sizes, system interconnects, and integrated memory controllers.
- Intel Turbo Boost Technology delivers additional performance automatically when needed by taking advantage of the processor's power and thermal headroom.
- Intel Hyper-Threading Technology brings high-performance applications into mainstream computing with 1-16+ threads optimized for a new generation multi-core processor architecture.
- Intel vPro Technology for maximized, hardware-assisted security and manageability

Certifications and approvals

RoHS	Compliant with the Restrictions of Hazardous Substances (RoHS) directive–2002/95/EC
WEEE	Designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive–2002/96/EC
ISO 11469 ISO 1043	Plastic parts used in the product weighing over 25 g are marked per ISO 11469 and ISO 1043
	Contains 0% recycled materials (by weight)
	Product is >90% recyclable when properly disposed of at end-of-life

Approvals

Region	Certification	
Global	DOC	Z420 Declaration of Conformity (CE + UL)

Installation/configuration notes

Language selection
This management workstation comes in four standard localizations:
MHW-WZ4R2-EEDE German localization/keyboard
MHW-WZ4R2-EEUK British English localization/keyboard
MHW-WZ4R2-EERU Russian localization/keyboard
MHW-WZ4R2-EEUS American English localization/keyboard
Additional optional keyboards listed under **Ordering Information** are available.

Notice
The Bosch management workstation provides a MUI (Multilingual User Interface). With MUI installed the language of the workstation may be changed after initial installation (for details see document “Installation Note MUI on Bosch Platforms”).

Parts included

Quantity	Components
1	HP Z420 8-DIMM Workstation
1	• HP Z420 localization kit (select desired language)
1	• HP Z420 600 W, 90% efficient chassis
1	• 500 GB, 7200 RPM SATA, 1st HDD
1	• HP USB standard keyboard
1	• HP USB optical scroll mouse
1	• HP blue-ray writer SATA 1st ODD
1	• Intel Xeon E5-1650 v2 (3.5/12 MB/1866 6C CPU)
1	• 8 GB (4 x 2 GB) DDR3-1600 ECC RAM
1	• AMD FirePro W7000 (4 GB, 4 x display ports) graphics card
1	• HP serial port adapter kit
1	Microsoft Windows 7 Ultimate Edition, 64-bit OS
1	HP 3-year Next Business Day on-site hardware support

Technical specifications

Electrical	
Power supply	600 W, 90% efficient, custom PSU (wide ranging, active Power Factor Correction)
Operating voltage range	90 to 269 VAC
Rated voltage range	100 to 240 VAC
	118 VAC
Rated line frequency	50/60 Hz (at 100 to 240 VAC)
	400 HZ (at 118 VAC)
Operating line frequency range	47 to 66 Hz (at 100 to 240 VAC)
	393 to 407 HZ (at 118 VAC)
Rated input current	100 to 240 VAC at 8.0 A
	118 VAC at 8.0 A
Power consumption in sleep mode (defined by ENERGY STAR)—suspend to RAM (S3) (instantly available PC)	<10 W
Heat dissipation (configuration and software dependent)	1365 BTU/h typical (344 kcal/h)
	2354 BTU/h max (593 kcal/h)
Power supply fan	92 x 25 mm variable speed

Electrical	
ENERGY STAR qualified	Yes
80 PLUS compliant	Yes, 90% efficient

Mechanical	
Form factor	Convertible minitower
Chassis dimensions (H x W x D)	
• Standard minitower orientation	44.76 x 17.78 x 44.52 cm (17.6 x 7.0 x 17.5 in)
• Converted desktop orientation	17.78 x 44.76 x 44.52 cm (7.0 x 17.6 x 17.5 in)

Environmental	
Temperature	
• operating	5 °C to 35 °C (40 °F to 95 °F)
• non-operating	-40 °C to 60 °C (-40 °F to 140 °F)
Humidity	
• operating	8 to 85% relative humidity, non-condensing
• non-operating	8 to 90% relative humidity, non-condensing
Maximum altitude (non-pressurized)	
• operating	3,048 m (10,000 feet)
• non-operating	9,144 m (30,000 feet)

Notes:

- General technical specifications for the workstation are provided in the HP Z420 QuickSpecs (DA-14261 Worldwide–Version 21 - June 1, 2013).
- Configuration specifications are supplied in the Parts Included section.

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Energy Star is a registered trademark of U.S. Environmental Protection Agency, all rights reserved.

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Ordering information

Z420 EE DE Management Workstation
Highest-performance workstation. German
Order number **MHW-WZ4R2-EEDE**

Z420 EE UK Management Workstation
Highest-performance workstation. British English
Order number **MHW-WZ4R2-EEUK**

Z420 EE RU Management Workstation
Highest-performance workstation. Russian
Order number **MHW-WZ4R2-EERU**

Z420 EE US Management Workstation
Highest-performance workstation. American English
Order number **MHW-WZ4R2-EEUS**

Accessories

Localization CH
Localization (Keyboard): Switzerland—French/German
Order number **MHW-AWLCK-SUI**

Localization CZ
Localization (Keyboard): Czech Republic—Czech
Order number **MHW-AWLCK-CZ**

Localization DK
Localization (Keyboard): Denmark—English
Order number **MHW-AWLCK-DK**

Localization ES
Localization (Keyboard): Spain—Spanish
Order number **MHW-AWLCK-ESP**

Localization FR
Localization (Keyboard): France—French
Order number **MHW-AWLCK-FR**

Localization IT
Localization (Keyboard): Italy—Italian
Order number **MHW-AWLCK-IT**

Localization NL
Localization (Keyboard): Netherlands—Dutch
Order number **MHW-AWLCK-NL**

Localization NO
Localization (Keyboard): Norway—Norwegian
Order number **MHW-AWLCK-NO**

Localization SV
Localization (Keyboard): Sweden—Swedish
Order number **MHW-AWLCK-SE**

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