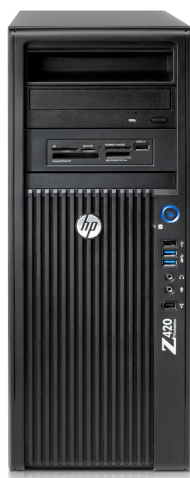


Z420 HE Management Workstation

www.boschsecurity.com



BOSCH
Invented for life



- ▶ High-performance workstation with Intel's latest-generation microarchitecture
- ▶ Dual-monitor support (NVIDIA Quadro K4000, 3 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 quad-core processor:

- Intel Xeon E5-1620 v2 (3.7 GHz, 10 MB cache, 1866 MHz memory speed, Quad-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 high-end NVIDIA Quadro K4000 (3 GB) 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 HE Management Workstation is the high-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
Europe	CE Z420 Declaration of Conformity (CE + UL)

Installation/configuration notes

Language selection

This management workstation comes in a standard localization:

MHW-WZ4R2-HEUS American English localization/
keyboard

Additional optional keyboards listed under **Ordering Information** are available.



Notice

The Bosch management workstation provides a MUI (Multilingual User Interface). Select the language of the workstation with the pre-installed MUI during initial installation.

After initial installation the language selected can not be changed!

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

Quantity	Components
1	• HP USB optical scroll mouse
1	• HP 16X DVD± RW SuperMulti SATA
1	• Intel Xeon E5-1620 v2 (3.7/10 MB/1866 QC CPU)
1	• 8 GB (4 x 2 GB) DDR3-1600 ECC RAM
1	• NVIDIA Quadro K4000, 3 GB graphics card
1	• HP serial port adapter kit
1	Microsoft Windows 7 Professional 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
ENERGY STAR qualified	Yes
80 PLUS compliant	Yes, 90% efficient
Mechanical	
Form factor	Convertible minitower
Chassis dimensions (H x W x D)	

Mechanical	
• 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.

80 PLUS is a registered trademark of Ecos, all rights reserved.

Ordering information

Z420 HE Management Workstation US

High-performance workstation. American English
Order number **MHW-WZ4R2-HEUS**

Accessories

Localization ES

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

Localization FR

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

Localization UK

Localization (Keyboard): United Kingdom—British English
Order number **MHW-AWLCK-UK**

Represented by:

Americas:

Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:

Bosch Security Systems B.V.
P.O. Box 80002
5617 BA Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:

Robert Bosch (SEA) Pte Ltd, Security
Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

China:

Bosch (Shanghai) Security Systems Ltd.
201 Building, No. 333 Fuquan Road
North IBP
Changning District, Shanghai
200335 China
Phone +86 21 22181111
Fax: +86 21 22182398
www.boschsecurity.com.cn

America Latina:

Robert Bosch Ltda Security Systems Division
Via Anhanguera, Km 98
CEP 13065-900
Campinas, Sao Paulo, Brazil
Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
latam.boschsecurity@bosch.com
www.boschsecurity.com