

# MHW-WZ4R0-EE Management Workstation

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**BOSCH**  
Invented for life



- ▶ Highest-performance workstation with Intel's latest-generation microarchitecture
- ▶ Dual-monitor support (NVIDIA Quadro 5000, 2.5 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 Z400 management workstation with its revolutionary new architecture and power is designed for video-oriented applications that require highest performance and most advanced visualization. With a smart new chassis that is easy to service, liquid cooling, and quiet operation this workstation is focusing on minimizing power and cooling costs with ENERGY STAR® qualified configurations featuring 85% efficient power supplies and HP WattSaver while taking on bigger computing challenges with the new Intel® QuickPath technology and the latest Intel® Xeon® quad-core processor:

- Intel® Xeon® W3550 (3.06 GHz, 8 MB cache, 1066 MHz memory, 4.8 GT/s QPI, Quad-Core, HT, Turbo)
- 6 GB (3 x 2 GB) DDR3-1333 ECC unbuffered RAM

HP Z400 is a workstation solution based on the Intel® X58 Express Chipset using Intel's QPI (Quick Path Interconnect) technology between the CPU and the X58 chipset with a speed of up to 4.8 GT/s (Giga Transfers per second).

With dual PCIe x16 Gen2 graphics interfaces and additional 1 PCIe x4 Gen2 and 1 PCIe x4 Gen1 slots, the HP Z400 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 NVIDIA Quadro 5000 (2.5 GB) 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

MHW-WZ4R0-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 (Nehalem) offers the latest in processor innovation, including:

- Dynamic scalability, managed cores, threads, cache, interfaces, and power for energy-efficient performance on demand.

- 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.
- Scalable shared memory of Intel® QuickPath technology features memory distributed to each processor with integrated memory controllers and high-speed point-to-point interconnects to unleash the performance of future versions of next generation Intel® multi-core processors.

### 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
Region	Certification
Global	DOC      Z400 Declaration of Conformity (CE + UL)
	RoHS      HP Compliance with RoHS directives

### Installation/Configuration Notes

#### Application package

MHW-WZ4R0-EE Management Workstation can have either the VIDOS or the Bosch VMS application package installed at one time.

#### Language selection

This management workstation comes in three standard localizations:

MHW-WZ4R0-EEDE German localization/keyboard

MHW-WZ4R0-EEUK British English localization/keyboard

MHW-WZ4R0-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 Z400 6-DIMM Workstation
1	• HP Z400 localization kit (select desired language)
1	• HP Z400 475 W, 85% efficient chassis
1	• HP 250 GB SATA 7200, 1st HDD
1	• HP USB standard keyboard
1	• HP USB optical scroll mouse
1	• HP 16X DVD± RW SuperMulti SATA
1	• Intel® Xeon® W3550 (3.06/8 MB/1066 QC CPU)
1	• HP 6 GB (3 x 2 GB) DDR3-1333 ECC RAM
1	• NVIDIA Quadro 5000 2.5 GB graphics card
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	475 W, wide ranging, Active Power Factor Correction, 85% efficient
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	10 A at 100 to 127 VAC
	6 A at 200 to 240 VAC
	10 A at 118 VAC
Power consumption in sleep mode (defined by ENERGY STAR®)—suspend to RAM (S3) (instantly available PC)	<6 W
Heat dissipation (configuration and software dependent)	1419 BTU/h typical (358 kcal/h)
	2027 BTU/h max (511 kcal/h)
Power supply fan	92 x 25 mm variable speed

ENERGY STAR® qualified	Yes
80 PLUS compliant	Yes
<b>Mechanical</b>	
Form factor	Convertible minitower
Chassis dimensions (H x W x D) Minitower or desktop orientation	45.53 x 45.02 x 16.79 cm (17.9 x 17.7 x 6.6 in)
<b>Environmental</b>	
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%
• non-operating	8 to 90%
Maximum altitude (non-pressurized)	
• operating	3,000 m (10,000 feet)
• non-operating	9,100 m (30,000 feet)

**Notes:**

- General technical specifications for the workstation are provided in the HP Z400 QuickSpecs (Worldwide—Version 28—January 1, 2011).
- Configuration specifications are supplied in the Parts Included section.

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**Ordering Information****MHW-WZ4R0-EEDE Management Workstation**

Highest-performance workstation, German localization included

Order number **MHW-WZ4R0-EEDE**

**MHW-WZ4R0-EEUK Management Workstation**

Highest-performance workstation, British English localization included

Order number **MHW-WZ4R0-EEUK**

**MHW-WZ4R0-EEUS Management Workstation**

Highest-performance workstation, American English localization included

Order number **MHW-WZ4R0-EEUS**

**Accessories****MHW-AWLCK-CZ**

Localization (Keyboard): Czech Republic—Czech

Order number **MHW-AWLCK-CZ**

**MHW-AWLCK-DE**

Localization (Keyboard): Germany—German

Order number **MHW-AWLCK-DE**

**MHW-AWLCK-DK**

Localization (Keyboard): Denmark—English

Order number **MHW-AWLCK-DK**

**MHW-AWLCK-ESP**

Localization (Keyboard): Spain—Spanish

Order number **MHW-AWLCK-ESP**

**MHW-AWLCK-FR**

Localization (Keyboard): France—French

Order number **MHW-AWLCK-FR**

**MHW-AWLCK-IT**

Localization (Keyboard): Italy—Italian

Order number **MHW-AWLCK-IT**

**MHW-AWLCK-NL**

Localization (Keyboard): Netherlands—Dutch

Order number **MHW-AWLCK-NL**

**MHW-AWLCK-NO**

Localization (Keyboard): Norway—Norwegian

Order number **MHW-AWLCK-NO**

**MHW-AWLCK-RU**

Localization (Keyboard): Russia—Russian

Order number **MHW-AWLCK-RU**

**MHW-AWLCK-SE**

Localization (Keyboard): Sweden—Swedish

Order number **MHW-AWLCK-SE**

**MHW-AWLCK-SUI**

Localization (Keyboard): Switzerland—French/German

Order number **MHW-AWLCK-SUI**

**MHW-AWLCK-UK**

Localization (Keyboard): United Kingdom—British English

Order number **MHW-AWLCK-UK**

**MHW-AWLCK-US**

Localization (Keyboard): USA — American English

Order number **MHW-AWLCK-US**

**MHW-AWSP-PCI**

HP Serial Port Adapter z-Series (not built-in)

Order number **MHW-AWSP-PCI**

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