

# SPECIFICATIONS

## Gateway M460 Notebook

Specifications are subject to change without notice or obligation.

### Processor and Core Logic

Processor options	<ul style="list-style-type: none"><li>One Intel® Celeron™ M CPU</li><li>-OR-</li><li>One Mobile Intel® Pentium® M CPU</li></ul> To determine your notebook's processor, click <b>Start, My Computer</b> , then click <b>View System Information</b> . The processor is listed.
Processor packaging	Intel socketable u-FCPGA
Level 2 cache	1 MB or 2 MB for Mobile Pentium M 512 KB or 1 MB for Celeron M
Chipset-Northbridge	<ul style="list-style-type: none"><li>Intel 915GM</li><li>-OR-</li><li>Intel 915PM</li></ul>
Chipset-Southbridge	Intel ICH6-M
Processor side bus speed	400/533 MHz
BIOS	<ul style="list-style-type: none"><li>Phoenix BIOS</li><li>1MB Flash ROM with Boot Block Support</li><li>SMBIOS 2.3 support</li><li>Advanced Configuration and Power Interface 2.0 (ACPI 2.0) support</li><li>Wired for Management 2.0 (WfM 2.0)</li></ul>

### System memory

Memory type	400/533 MHz DDR2 RAM
Memory expansion options	<ul style="list-style-type: none"><li>Two 200-pin industry standard DDR2-SODIMM socket, user accessible</li><li>2 GB maximum system memory</li></ul> To determine your notebook's memory, click <b>Start, My Computer</b> , then click <b>View System Information</b> . The memory is listed.

## Video

Graphics controller	<ul style="list-style-type: none"><li>▪ Intel GMA 900 (chipset integrated) -OR-</li><li>▪ ATI Mobility Radeon X600</li></ul> <ul style="list-style-type: none"><li>▪ 2D hardware acceleration</li><li>▪ 3D rendering acceleration</li><li>▪ High quality performance texture engine</li></ul>
Video memory	<ul style="list-style-type: none"><li>▪ Up to 64 MB UMA (Intel) -OR-</li><li>▪ 64 or 128 MB (ATI)</li></ul>
LCD display panel	15.0-inch or 15.4-inch active matrix (TFT) LCD color display Maximum panel resolution: 1280 × 800 (15.4-inch) and 1440 × 1050 (15.0-inch) Maximum color depth: 32-bit (16.7 million colors) at 1024 × 768 and 262,144 colors at 1280 × 768
LCD supported video modes	<ul style="list-style-type: none"><li>▪ XGA</li><li>▪ SXGA+</li><li>▪ WXGA</li></ul>
LCD maximum refresh rate	60 Hz
Controls	<ul style="list-style-type: none"><li>▪ Brightness level selectable through FN keys (up, down)</li><li>▪ Auto dim on battery and auto bright on AC power (selectable in BIOS)</li></ul>
External video	Supports dual display and dual view
External CRT resolutions	Supports standard IBM VGA compatible modes Maximum resolution: 2048 × 1538 Maximum color depth: 32-bit colors
External CRT maximum refresh rate	85 Hz at 1600 × 1200 75 Hz at 2048 × 1538

## Audio

- Sound support
- Conexant SmartAMCi Audio Modem Codec (AMC) CX20468-31
  - AC'97 Revision 2.3 Compliant
- NOTE: This notebook does not support SPDIF.
- Volume controls
- Volume control keys on keyboard
  - Software control provided through Windows
- Internal speakers
- Stereo speakers built into the front of notebook
  - 1.0 W maximum output for each channel
- Internal microphone
- Omni-directional, low impedance
- Audio jacks
- Stereo headphone output
  - Stereo microphone input

## Communications

- Modem features
- 56K v.90 modem
  - Uses the RJ-11 jack on the right side of the notebook
  - Supports Wake on Ring from S3 power mode
- 10/100 Mbps Ethernet interface features
- Integrated IEEE 802.3 (10/100/1000BASE-T) Gigabit Ethernet interface
  - Uses the RJ-45 jack on the right side of the notebook
  - Supports Wake on LAN from S3 in battery mode and Wake on LAN from S4 and S5 in AC mode
- Wireless Ethernet interface features  
**(Factory installed option)**
- Intel® PRO/Wireless IEEE 802.11b/g network card embedded in the notebook
  - OR-
  - Intel® PRO/Wireless IEEE 802.11a/b/g network card embedded in the notebook
- FN+F2** keyboard combination toggles wireless networking
- Antenna:** Uses factory-installed internal antenna assembly
- Operating channels:** 11 selectable channels
- Security:** 128 and 64 bit WEP encryption
- Operating Frequency**
- 2.4 GHz Direct Sequence Spread Spectrum (IEEE 802.11b and IEEE 802.11g)
  - 5.0 GHz (IEEE 802.11a)
- Maximum Data Rate**
- 54 Mbps (IEEE802.11g and IEEE 802.11a)
  - 11 Mbps (IEEE802.11b)

## Input/Output (I/O)

### Keyboard

- U.S. English keyboard
- Full-sized 86-keys
- 19 mm × 19 mm key pitch
- 3.0 mm keystroke

### Pointing device

- Gateway EZ-Pad™ touchpad with vertical scroll
- 2-button design
- Optional EZ-Point™ keyboard pointing device 2-button design

### Status indicators

FN+F1 keyboard combination turns status indicators on and off.

- AC power
- Wireless Ethernet
- Caps lock
- Num lock
- Module access/swap
- Hard drive access
- Power/battery charge

### Input/Output (I/O) ports

- Four USB 2.0 (4-pin)
- IEEE 1394 (4-pin)
- V.92, 56K Modem (RJ-11)
- 10/100 Ethernet (RJ-45)
- External monitor (VGA)
- Stereo headphone output
- Stereo microphone input
- PC Card socket (one Type II)
- S-Video TV out
- DC input

### PCMCIA

- Accepts one Type II device
- TI PCI7411 controller

NOTE: This notebook does not support Zoom Video.

## Docking solution

Type	Port replicator
Docking supported	<ul style="list-style-type: none"><li>▪ Hot dock</li><li>▪ Warm dock</li><li>▪ Cold dock</li></ul>
Input/Output (I/O ports)	<ul style="list-style-type: none"><li>▪ Ethernet (RJ-45)</li><li>▪ Modem (RJ-11)</li><li>▪ S-Video TV out</li><li>▪ Four USB 2.0 (4-pin)</li><li>▪ External monitor (VGA)</li><li>▪ Parallel</li><li>▪ High-speed serial</li><li>▪ IEEE 1394 (4-pin)</li><li>▪ Stereo headphone output</li><li>▪ Stereo microphone input</li><li>▪ Docking port</li><li>▪ DC input</li></ul>
Security	Kensington lock loop

## Storage

Hard drive	<ul style="list-style-type: none"><li>▪ User removable</li><li>▪ 2.5-inch diameter</li><li>▪ 9.5 mm height</li></ul> <p>To find the hard drive capacity, click <b>Start</b>, then click <b>My Computer</b>. Right-click the drive letter, then click <b>Properties</b>. The drive's capacity and available space appears. If the drive has multiple partitions (for example, C: and D:), add the capacities of each partition to determine the drive's total capacity.</p>
Memory card reader	<p>Supports the following card types:</p> <ul style="list-style-type: none"><li>▪ Memory Stick<sup>®</sup></li><li>▪ Memory Stick Pro<sup>®</sup></li><li>▪ MultiMediaCard<sup>™</sup></li><li>▪ Secure Digital<sup>™</sup></li></ul>

## Modular bay

One modular bay is available on the notebook. The modules are hot-swappable.

### **Optical Drive**

Available optical drives include:

- CD
- Combination DVD/CD-RW
- DVD±R/±RW

To determine the type of drive in a bay, examine the drive tray's plastic cover. A CD Compact Disc logo indicates a CD drive, a DVD logo in combination with a CD-R/RW logo indicates a DVD drive that also is a recordable/rewritable CD drive, and a DVD-ROM/R/RW logo in combination with a CD-R/RW logo indicates a recordable/rewritable DVD drive that also is a recordable/rewritable CD drive.

### **Second Hard Drive**

- 2.5-inch diameter
- 12.7 mm or 9.5 mm high

### **Diskette Drive**

- 12.7 mm high
- 3.5-inch diskettes
- 720K/1.2M/1.44M support

### **Secondary Battery**

- Removable six-cell prismatic Lithium Ion battery pack
- 4.8 Ah
- 10.8 V nominal
- 51.8 Wh

## **Power**

### AC adapter

- 19 VDC, 3.42A, 65 W output (Intel graphics)
- OR-
- 19 VDC, 4.74A, 90 W output (ATI graphics)
  
- Automatically adjusts for 100 to 240 VAC, 50 to 60 Hz power sources
- Three-wire design

### Battery type

- Removable Lithium Ion battery pack
- Embedded controller inside to support SBS 1.1

Battery capacity

**6-cell**

- 4.8 Ah
- 11.1 V nominal
- 53.2 Whr

**8-cell**

- 4.8 Ah
- 14.8 V nominal
- 71 Whr

**12-cell**

- 6.6 Ah
- 14.8 V nominal
- 97 Whr

Battery life varies depending on configuration, programs, power management settings, and features used. Recharge time varies, depending on usage.

Power management

- Advanced Configuration and Power Interface 2.0 (ACPI 2.0) support
- SMBIOS 2.3
- PC 2001 compliant
- Mobile Intel® Pentium® M supports Intel® Speedstep™ technology

Controls

Icon on taskbar shows battery charge as a percentage remaining

Power switch

Supports Power On/Off, Standby/Resume, Hibernate using Windows Setting, Shutdown

Lid switch

LCD On/Off, Standby, Hibernate

**Security**

Passwords

- Power-on password (user/supervisor password set in BIOS)
- Hard drive password

Physical

- Main system memory compartment screw
- Hard drive kit screws
- Mini PCI bay screw
- Kensington® security slot on notebook back

## System software

Operating system	<ul style="list-style-type: none"><li>▪ Microsoft® Windows® XP Professional</li><li>▪ Microsoft® Windows® XP Home Edition</li></ul>
System management	<ul style="list-style-type: none"><li>▪ SMBIOS 2.3 BIOS support</li><li>▪ Advanced Configuration and Power Interface 2.0 (ACPI 2.0) support</li><li>▪ Support for Wake on LAN from S3 power mode</li><li>▪ Wired for Management 2.0 (WfM 2.0) enabled</li></ul>
System compatibility	<ul style="list-style-type: none"><li>▪ PC2001 specification</li><li>▪ SMBIOS 2.3</li><li>▪ Windows Hardware Quality Labs (WHQL) certified</li></ul>
Quick boot	Supported

## Physical specifications

Dimensions	~14.1 × 10.4 × 1.3 in. (W × D × H) ~358 × 264 × 33.2 mm (W × D × H)
System weight	~6.15 lbs. (~2.79 kg) Includes optical drive and battery Weight varies based on configuration
AC adapter weight	~0.82 lbs (~0.37 kg) 65 W adapter -OR- ~1.25 lbs (~0.57 g) 90 W adapter Includes cord

## Environment

Operating temperature	50°F to 90°F (10°C to 32°C)
Storage temperature	4°F to 140°F (-15°C to 60°C)
Operating humidity	20% to 80% relative humidity; no condensation

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