



ENVIRONMENTAL DATA SHEET
PRODUCT: Dell Precision™ M50

Dell Computer Corporation
www.dell.com

SYSTEM DIMENSION AND WEIGHT

Depth, cm	Width, cm	Height, cm	Weight, kg
27.6	33.1	4.6	3.5 depending on options installed

DECLARATIONS AND CERTIFICATIONS

This system received the following approvals and may be labeled with one or more of these marks depending on point of purchase:

Approvals	Certificate #	Yes / No / N/A
• USA: Energy Star	N/A	Yes
• TUV-GS (visual ergonomics - systems without LCDs: ISO 9241 -3/-8 -- portables: ISO 9241-4, ISO 13406, and DIN 2137)	N/A	Yes
• Nordic: TCO'99	N/A	No
• Germany: Blue Angel	N/A	No

PERFORMANCE DATA¹

Electromagnetic Compatibility

Systems marked with the symbol "CE" indicate compliance to the EMC Directive and the Low Voltage Directive of the European Union.

System Configuration

The Energy Consumption and Declared Noise Emissions data is based on a configuration including an Intel® 1.5 GHz Pentium® 4 processor, a 48 GB hard drive, a floppy drive and a DVD-ROM.

Energy Consumption

Service Level	Energy Consumption (Wattage)	Heat Dissipation (BTU/hr)	Description of Service Level	Energy Save Requirements Meets EU Eco label (2001/686/EC and 2001/687/EC) Yes / No / N/A
Maximum	78	266	The system is running programs to maximize the power consumption.	N/A
Minimum	30	102	The system is in a waiting mode, such as at the MS-DOS prompt.	N/A
ACPI S3	<3	10	The system is in a low-power sleep mode.	Yes
Off	<2	6	The system is turned off but is still connected to its AC power source.	No
Power Supply	N/A	N/A	AC adapter is connected to mains with portable detached (portables only).	N/A

Energy consumption is tested at *230 Volts / 50 Hz*. Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour. Off data is not meant to show compliance to US Executive Order 13221. When applicable, Dell product information related to US Executive Order 13221 may be obtained at: <http://oahu.lbl.gov/index.html>.

Declared Noise Emissions in accordance with ISO 9296

Service Level	Sound Power ($L_{WA,dr}$, bels) (1 bel=10 decibels, re 10^{-12} Watts)	Sound Pressure Operator Position ($L_{pA,mr}$, decibels) (re 2×10^{-5} Pa)
Floppy Drive Accessing	4.4	36.5
Hard Drive Accessing	3.4	31.1
Idle	3.3	22.8

¹ This document is informational only and reflects laboratory performance. Your product may perform differently, depending on the software, components and peripherals you ordered. Accordingly, the customer should not rely upon this information in making decisions about electrical tolerances or otherwise. No warranty as to accuracy or completeness is expressed or implied. The information in this document may change without notice; please note the revision number on the last page.



PRODUCT MATERIALS INFORMATION²

Restricted Substances

This Dell product (plastic case parts, printed wiring boards, power supplies, and microprocessors) does NOT contain any of the following substances (in concentrations exceeding natural background levels)

- Asbestos
- Cadmium and its compounds above 100 parts per million (ppm)
- Halogenated dioxins or furans (i.e. polychlorinated dibenzodioxines, polychlorinated dibenzofurans)
- Halogenated flame retardants (chlorinated, brominated) in plastic parts over 25g
- Mercury (except for fluorescent bulbs used in display units)
- PCBs (polychlorobiphenyls) or PCTs (polychloroterphenyls)
- PBBs (polybromobiphenyls) or PBDEs (polybrominated diphenylethers)
- PVC (polyvinyl chloride) other than in cables and interconnect parts
- CFCs (chlorofluorocarbons), HCFCs (hydrofluorocarbons) and other ozone depleting substances
- Lead is not used in paints

None of the substances included in the Montreal Protocol annex A, B, or C is used in Dell's manufacturing plants.

Additional Materials Information

- The cables may use PVC as an insulating material to ensure product safety
- The case material is PC+ABS
- This product does contain one or more mercury bulbs LCD back panel

Flame Retardants Used in Mechanical Plastic Parts > 25 grams, Keycaps, and Motherboards

Part	Flame Retardant	ISO 1043-4	ISO 11469
Motherboard	TBBPA	FR(16)	N/A
Keycaps (portables only)		N/A	N/A
Mechanical Plastic Parts > 25 grams PC+ABS	Triaryl Phosphate Ester	FR(40)	ISO 11469

Packaging

No CFCs (chlorofluorocarbons), HCFCs (hydrofluorocarbons) or other ozone depleting substances are used in packaging material. Chromium, lead, mercury, or cadmium are not intentionally added to packaging materials and are not present in a cumulative concentration greater than 100 ppm as incidental impurities.

Criteria	Yes / No
• No halogenated plastics or polymers are used for packaging material	Yes
• Dell complies with the EU Directive 94/ 62/ EEC	Yes
• Depending on your point of purchase, packaging materials are labeled in accordance with DIN 6120 – "Marking of packing materials and packages for their recycling"	

Packaging Materials	Weight, kg
Fabricated Polyethylene	0.14
Corrugated Cardboard	Up to 2.82

Printed user documentation is bleached in a chlorine-free process. (Europe Only)

² **Waste Handling.** Local regulations should be observed when disposing of this product due to the presence of the materials and substances as listed above.



Batteries

Batteries in this product are not based on mercury, lead or cadmium technologies. The batteries used in this product are in compliance with:

- EU Directive 91/ 157/ EEC
- EU Directive 93/ 86/ EEC
- EU Directive 98/ 101/ EEC

The product documentation includes instructional information on the proper removal and disposal of the batteries used in this product. Below is a listing of batteries present in the product:

Battery Description – Internal Batteries	Battery Type
Coin Cell Battery	Nickel metal hydride
Rechargeable Battery Pack 8-cell	Lithium ion

DESIGN FOR ENVIRONMENT

Visit www.dell.com/environment for more information.

Longevity and Upgrading

Dell systems are, when applicable, designed for easy assembly, disassembly, and servicing. To extend the life of your system, you can install or upgrade certain system components (e.g., microprocessor, memory, expansion cards, and storage devices). Spare parts are available after the end of production for up to five years, or otherwise through the warranty period.

Recyclability

For recyclability, this system incorporates the following design guidelines:

- Minimal use of non-separable connections, such as gluing and welding between different materials. Yes
- Minimal use of composite structure materials. Yes
- Painting/varnishing plastic material has been avoided. Yes
- Mechanical plastic parts greater than 100 grams consist of one material or of easily separable materials. Yes

RECYCLING/ END-OF-LIFE SERVICE INFORMATION

Take back and recycling services are offered for this product in certain countries. If you want to dispose of system components, contact Dell for instructions.

DELL CORPORATE ENVIRONMENTAL INFORMATION

The following information is available at www.dell.com/environment:

- Corporate Environmental Policy
- Environmental Reports
- ISO 14001 certified environmental management systems