



MARKETING NAME*: Vostro™ 460
REGULATORY MODEL: D10M
REGULATORY TYPE: D10M001
EFFECTIVE DATE: January 13, 2011

Dell Inc.
www.dell.com

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I. PRODUCT SAFETY¹

The product has been certified and bears the Mark, as applicable, of the Product Safety authorities as indicated below.

Country/Region	Authority or Mark
Canada	SCC
Mexico	NYCE or NOM
United States	NRTL
Argentina	IRAM

II. ELECTROMAGNETIC COMPATIBILITY²

The product has been certified and bears the Mark, as applicable, of the EMC authorities as indicated below.

Country/Region	Authority or Mark	Class
Canada	ICES	Class B
United States	FCC	Class B

III. POWER CORDS AND USER DOCUMENTATION

Dell products are provided with the power cord and user documentation suitable for the intended country of delivery. Products that are relocated to other countries should use nationally certified power cords and plugs to ensure safe operation of the product. Contact Dell to determine if alternate power cords or user documentation in other languages is available for your market.

IV. DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS

Dell Inc.
Department: Global Regulations and Standards
MS: PS4-30
Round Rock, Texas 78682, USA
512-338-4400
Regulatory_Compliance@Dell.com

* Notice: This product has been assigned a unique regulatory model and regulatory type that is imprinted on the product shipping invoice and product labeling to provide traceability to the regulatory approvals noted on this datasheet. This datasheet applies to any product that utilizes the assigned regulatory model and type including marketing names other than those listed on this datasheet. Requests for specific information on product regulatory approvals should reference the assigned product regulatory model and type.

¹ The above-listed Product Safety certifications may vary depending upon the location of the factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser's country.

² The above-listed EMC certifications may vary depending upon the location of the factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser's country.



V. TRADE (IMPORT/EXPORT) COMPLIANCE DATA

System US Harmonized Tariff System (USHTS) Number	8471.50.0150
System US Export Control Classification Number (ECCN)	4A994

For additional questions regarding importing & exporting classification of Dell products, please send an e-mail to: US_Export_Classification@Dell.com

VI. SYSTEM DIMENSION AND WEIGHT

Depth, mm/cm	Width, mm/cm	Height, mm/cm	Weight, kg	Optimal Resolution (Display Only)
445.00 mm	175.00 mm	362.90 mm	11.220 kg	N/A

VII. 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
Japan	Green PC	1, 2, or 3 Star
South Korea	E-standby	Yes

* EPEAT registered where applicable/supported see: [Desktops](#), [Monitors](#), [Notebooks](#), [Workstation-Desktops](#), and [Workstation-Notebooks](#) for registration status by country.

Information on Dell's participation in various Eco-labels and Green Standards can be found [here](#).

Dell is a member of the Electronic Industry Citizenship Coalition (www.eicc.info)

Through internal design controls and supply chain declarations, this system has been verified to comply with the EU RoHS Directive. For more details, see www.dell.com/rohsinfo.

All Dell products shipping directly into China which are manufactured on or after March 1st, 2007, will be China RoHS compliant. For more details, see www.dell.com/chinarohs.

All Dell products shipping to South Korea are compliant with South Korea RoHS requirements, declarations [here](#).

Information on Japan RoHS (J-MOSS) chemical disclosures is available [here](#).

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals, EC 1907/2006) is the European Union's (EU) chemical substances regulatory framework. Dell complies with the REACH directive. For more details, see www.dell.com/REACH

Dell's Energy Star qualified products are listed on the EPA website [here](#)



VIII. PERFORMANCE DATA

System Configuration

The Energy Consumption and Declared Noise Emissions data is based on a configuration including:

Processor	SANDY BRIDGE D-0 6MB 4c LGA 3.2GHZ 95W GT1 ES2
Hard Drive(s)	Seagate 1.5TB/7200RPM
Memory	Four Hynix 4G/1333MHz
Video Card	CRD,GRPHC,GTX,460,P202N
RMSD / Optical Drive	PLDS DVD+/-RW,16X,HH
Power Supply (Internal or External)	Delta Internal PWR SPLY
Power Supply Size in Watts	350W
Power Supply Efficiency Level	65%

Energy Consumption³

Service Level	Energy Consumption (Wattage)	Heat Dissipation (BTU/hr). AUTOMATICALLY CALCULATED	Description of Service Level
*Maximum	224.73	768.5766	The system is running programs to maximize the power consumption.
Idle Mode	64.463	220.46346	As specified EPA Energy Star Computer mode.
S3 "Sleep" Mode	2.712	9.27504	Suspend-to-RAM (low power/sleep mode)
Off	0.74	2.5308	System is turned off but still connected to its AC power source. If the product is a computer, the Low Power Mode feature is enabled via BIOS if available.
External Power Supply "No-Load" (if applicable)	N/A	N/A	AC adapter connected to mains with system detached otherwise known as "No-Load" condition.

*Maximum **Energy Consumption** results are based solely upon the laboratory testing of the **System Configuration** listed above.

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. BTU is calculated based upon the wattage reading taken in the given mode. To convert Watts to BTU, (1 Watt = 3.42 BTU)

If applicable, iAMT increases the power consumption even during the off state. The power measurements reported above are valid only if the iAMT Management Engine (ME) is set to "ON" in S0 state only (S0 is simply power-on, non-sleep, working state).

ErP compliance is tied to the CE mark.

³ 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.



Declared Noise Emissions in accordance with ISO 9296 (tested in accordance with ISO 7779)

Service Level	Sound Power ($L_{WA,d}$, bels) (1 bel=10 decibels, re 10 ⁻¹² Watts)	Sound Pressure Operator Position (L_{pAm} , decibels) (re 2x10 ⁻⁵ Pa)	Sound Pressure Bystander Position (L_{pAm} , decibels) (re 2x10 ⁻⁵ Pa)
Hard Drive Accessing	3.8	21.2	21.2
Optical Drive Accessing	5.1	33.6	32.9
Idle	3.8	21.1	21.1
CPU activated (at a utilization of 50%) ECMA-74	N/A	N/A	N/A
CPU activated (at a utilization of 90%) Blue Angel UZ 78	4.2	22.9	23.1

IX. PRODUCT MATERIALS INFORMATION⁴

Restricted Substances

This Dell product does **NOT** contain any of the following substances (in concentrations exceeding legal threshold limits):

- Asbestos
- Azo dyes/colorants in components that come into direct contact with human skin
- Cadmium and its compounds (except for use in applications exempted by the EU RoHS Directive)
- Class I and Class II CFCs (chlorofluorocarbons) and HCFCs (hydrofluorocarbons)
- Chloroparaffins, short chained (10-13 carbon chain)
- Chromium VI and its compounds (except for use in applications exempted by the EU RoHS Directive)
- Halogenated dioxins or furans (i.e. polychlorinated dibenzodioxines, polychlorinated dibenzofurans)
- Lead and its compounds (except for use in applications exempted by the EU RoHS Directive)
- Mercury (except for use in applications exempted by the EU RoHS Directive)
- Nickel and its compounds in components that are likely to result in prolonged skin exposure
- PCBs (polychlorobiphenyls) or PCTs (polychloroterphenyls)
- PBBs (polybromobiphenyls) or PBDEs (polybrominated diphenylethers)
- PVC (polyvinyl chloride) in plastic parts greater than 25 grams
- Polychlorinated naphthalenes (PCNs)
- Tributyl tin (TBT) and triphenyl tin (TPT) compounds

For information on Japan RoHS (J-MOSS) chemical disclosures: www.dell.com/japan_rohs.

Additional Materials Information

- External and/or Internal cables may use PVC as an insulating material to ensure product safety
- The case material is, > < (i.e. PC+ABS, Aluminum, etc)
- Product may contain post-industrial recycled content (plastics, metal, glass)
- This product contains x% post consumer recycled plastic
- Materials that may require special handling, please see WEEE Product End-of-Life Instructions [here](#)
- Marking of plastic parts greater than 25 grams are done in accordance with ISO 11469 (see below)

⁴ **Waste Handling.** Local regulations should be observed when disposing of this product due to the presence of the materials and substances as listed above.



Flame Retardants Used in Motherboard

Part	Flame Retardant
Motherboard	BFR,CFR

Flame Retardants Used in Mechanical Plastic Parts > 25 grams

Resin Material	Marking per ISO 11469:2000, 11469:1996	Flame Retardant Marking per ISO 1043-4 (i.e. FR(16), FR(40), etc.)	Flame Retardant (i.e. TBBPA, triaryl phosphate ester, etc.)	List applicable R-Phrase(s) per EU Directive 1272/2008
ABS	>ABS<	FR(40)	Organo Phosphate	R43
PC+ABS	>PC+ABS<	FR(40)	Organo Phosphate	R43

X. 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. No halogenated plastics or polymers are used for packaging material. Dell complies with the EU Directive 94/62/EEC.

Packaging Materials	Weight, kg
PE Bag	NA
Carton	1.52
EPE cushion	0.24
Accessory Box	0.22
Dryer	NA

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

XI. 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, and EU Battery Directive 2006/66/EC.

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	Battery Weight (kg)
CR-2032 coin cell	Lithium	0.00032(MITSUBISHI)
CR-2032 coin cell	Lithium	0.00029(PANASONIC)

- Batteries used in this product are in compliance with EU Battery Directive 2006/66/EC.
- Batteries in this product are not based on mercury, lead or cadmium technologies.
- Information about takeback and the recycling of batteries can be found in the in the Recyclability section below.
- The product documentation includes instructional information on the proper removal and disposal of the batteries used in this product.



XII. DESIGN FOR ENVIRONMENT

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

Information for recycling is available [here](#).

For recyclability, this system incorporates the following design guidelines:

- EU WEEE mark is applied to products sold in Europe, EU recycling information can be found at www.euro.dell.com/recycling
- WEEE Product End-of-Life Instructions are available [here](#)
- Plastic parts heavier than 25g have material codes according to ISO 11469:2000.
- Minimal use of composite structure materials.
- Minimal use of non-separable connections, such as gluing and welding between different materials.
- Painting/coating of Desktop chassis plastics has been avoided.
- Painting/coating of plastics <100 grams is compatible with recycling or reuse
- Mechanical plastic parts greater than 100 grams consist of one material or of easily separable materials.

XIII. 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 by emailing recycling_emea@dell.com or visit www.dell.com/recyclingworldwide and select the relevant country.

XIV. DELL CORPORATE ENVIRONMENTAL INFORMATION

Information on Dell's Environmental initiatives, policies, programs and goals can be found at www.dell.com/environment.

Dell's Corporate Responsibility Policies are available [here](#).

Product Safety, EMC and Environmental Datasheets for Dell products are located at: www.dell.com/regulatory_compliance_datasheets

Dell's commitment to accountability and assurance is further demonstrated in leveraging the Global Reporting Initiatives (GRI) G3 Guidelines in the preparation of our annual summary report and Web site. We are self-reporting at a B level and have submitted our self-report to GRI to check it against the criteria for GRI Application Level B. To view GRI Index 2009 click [here](#).

Dell holds International Organization for Standardization (ISO) and Occupational Health & Safety Assessment Series (OHSAS) certifications/registrations in a number of important areas including global product development and recycling/take-back programs, quality, safety, and health and environment. You can view or download copies of certificates [here](#).

Information related to Supplier Responsibility is available [here](#).