



PRODUCT: Vostro™ 410, Vostro™ 410n  
 REGULATORY MODEL: DCGAF  
 EFFECTIVE DATE: September 18, 2008

Dell Inc.  
 www.dell.com

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## I. PRODUCT SAFETY<sup>1</sup>

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

Country/Region	Authority or Mark	Non PFC <sup>2</sup>
Argentina	IRAM	Y
Belarus	BELLIS	N
Cambodia	ISC	N
Canada	SCC	Y
China	CNCA or CCC	N
Croatia	KONCAR	N
European Union	CE	N
IECEE	IECEE CB	Y
Israel	SII	N
Kazakhstan	OTAN – CKT	N
Kenya	KEBS	Y
Mexico	NYCE or NOM	Y
Moldova	INSM	N
Nigeria	SONCAP	Y
Norway	NEMKO	N
Russia	GOST	N
Saudi Arabia	KSA ICCP	N
Singapore	Safety Registration Scheme	Y
South Africa	SABS	N
Ukraine	UKRTEST or UKRSERTCOMPUTER	N
United States	NRTL	Y
Uzbekistan	STZ	N

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

<sup>2</sup> This indicates if the listed country/region will accept a non-PFC power supply. A "Y" indicates some or all the products delivered in that county/region may include a non-PFC supply. In those cases, any approvals that are listed as "N", indicating they require a PFC supply will not be applied to product purchased in non-PFC country/regions.



## II. ELECTROMAGNETIC COMPATIBILITY<sup>3</sup>

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

Country/Region	Authority or Mark	Class	Non PFC <sup>4</sup>
Australia / New Zealand	ACMA or C-Tick	Class B	Y
Belarus	BELLIS	Class B	N
Bosnia & Herzegovina, Montenegro, Serbia	KVALITET	Class B	N
Canada	ICES	Class B	Y
China	CNCA or CCC	Class B	N
Croatia	KONCAR	Class B	N
European Union	CE	Class B	N
Israel	SII	Class B	N
Japan	VCCI	Class B	Y
Kazakhstan	OTAN – CKT	Class B	N
Moldova	INSM	Class B	N
Norway	NEMKO	Class B	N
Russia	GOST	Class B	N
South Africa	SABS	Class B	N
South Korea	KCC	Class B	Y
Ukraine	UKRTEST or UKRSERTCOMPUTER	Class B	N
United States	FCC	Class B	Y
Uzbekistan	STZ	Class B	N
Vietnam	ICT	Class B	N

## III. ERGONOMICS, ACOUSTICS AND HYGIENICS<sup>5</sup>

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

Country/Region	Authority or Mark	Non PFC <sup>6</sup>
Belarus	BELLIS	N
Russia	GOST	N

<sup>3</sup> The above-listed EMC certifications may vary depending upon the location of the Dell factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser's country.

<sup>4</sup> This indicates if the listed country/region will accept a non-PFC power supply. A "Y" indicates some or all the products delivered in that county/region may include a non-PFC supply. In those cases, any approvals that are listed as "N", indicating they require a PFC supply will not be applied to product purchased in non-PFC country/regions.

<sup>5</sup> The above-listed Ergonomics, Acoustics and Hygienics certifications may vary depending upon the location of the Dell factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser's country.

<sup>6</sup> This indicates if the listed country/region will accept a non-PFC power supply. A "Y" indicates some or all the products delivered in that county/region may include a non-PFC supply. In those cases, any approvals that are listed as "N", indicating they require a PFC supply will not be applied to product purchased in non-PFC country/regions.



#### IV. Power Factor Correction (PFC)

Power factor is the ratio of real power (P) to the apparent or complex power (S) in an ac mains power distribution system. Unity power factor occurs when voltage and current are in phase and is the optimal load for the power distribution system. Common electronic products present reactive loads that are not in phase. These out-of-phase situations create an apparent power load to the distribution system that introduces inefficiencies and require increased power generation capacity and load carrying characteristics for the ac power distribution system. Power factor correction (PFC) is the technique used to minimize the effect of product loads that present a non unity power factor. For ease in determining if your product configuration includes a PFC power supply, check for the presence of the CE marking on the product regulatory label; the CE marking will appear only on products that have PFC power supplies.

The following countries are provided with Dell product containing PFC power supplies: Austria, Acores (Portugal), Albania, Andorra, Anguilla (United Kingdom), Aruba (Netherlands), Armenia, Azerbaijan, Basses da India (France), Belarus, Belgium, Bermuda (United Kingdom), Bosnia, Bouvet Island (Norway), British Island Ocean Territory, Bulgaria, Cambodia, Cayman Islands (United Kingdom), China, Clipperton Island (France), Canarias (Spain), Croatia, Cyprus, Czech Republic, Denmark, Estonia, Europa Island (France), Falkland Islands [Islas Malvinas] (United Kingdom), Finland, France, Faroe Island (Denmark), French Polynesian (France), French Southern and Antarctic Islands (France), Gaza Strip, Georgia, Gibraltar (United Kingdom), Glorious Islands (France), Greenland, Germany, Greece, Guadeloupe (France), Guyana (France), Guernsey, Hong Kong, Herzegovina, Hungary, Iceland, Îles Crozet (France), Îles Kerguelen (France), Îles Amsterdam and Saint-Paul (France), Ireland, India, Israel, Italy, Juan de Nova Island (France), Kazakhstan, Latvia, Lithuania, Liechtenstein, Luxembourg, Malta, Moldova, Macedonia, Madeira (Portugal), Malta, Martinique (France), Montenegro, Monaco, Netherlands, Norway, Poland, Portugal, Reunion (France), Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Tunisia, Tromelin Island (France), Turkey, Ukraine, United Arab Emirates, United Kingdom, Vatican City State.

#### V. 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.

#### VI. 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](mailto:Regulatory_Compliance@Dell.com)



## VII. 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](mailto:US_Export_Classification@Dell.com)

## VIII. SYSTEM DIMENSION AND WEIGHT

Depth, cm	Width, cm	Height, cm	Weight, kg
47.5	18.5	41.5	13.9 (May vary with additional options installed)

## IX. 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
Energy Smart Offering (Good)	N/A	Yes
China: China Energy Certification Program (CECP)	CQC08701022968	Yes

Through internal design controls and supply chain declarations, this system has been verified to comply with the EU RoHS Directive. For more details, please see [www.dell.com/rohsinfo](http://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, please see [www.dell.com/rohs](http://www.dell.com/rohs).



## X. PERFORMANCE DATA

### System Configuration

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

Processor	1 Intel 2.4GHz Q6600
Hard Drive(s)	2 250GB
CD-ROM	DVD+/-RW
FDD	No
Video Card	Geforce 8800GT
TV Card	No
Sound Card	No
Network Card	No
Modem Card	Yes
Other Cards	No
Power Supply	Qty 1 Wattage 350

### Energy Consumption<sup>7</sup>

Service Level	Energy Consumption (Wattage)	Description of Service Level
*Maximum	166.86	The data provided is the highest wattage reading while running an Industry Benchmark suite of tests.
Idle	109.48	As specified by the EPA Computer spec 4.0 or system is sitting at the main Windows screen.
ACPI-S3 "Standby" Mode	2.54	Suspend-to-RAM (low power mode)
ACPI-S4 "Hibernate" Mode	1.70	Suspend-to-Disk (a lower power mode)
Off Low Power Mode Disabled	1.69	System is turned off with the Low power Mode feature disabled via the BIOS

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

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).

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>.

<sup>7</sup> 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 ( $L_{pAm,r}$ , decibels) (re $2 \times 10^{-5}$ Pa)	Sound Pressure Bystander Position ( $L_{pAm,r}$ , decibels) (re $2 \times 10^{-5}$ Pa)
Hard Drive Accessing	4.3	25.4	25.1
CD Drive Accessing	5.1	35.6	33.8
Idle	4.3	25.5	25.4

## XI. PRODUCT MATERIALS INFORMATION<sup>8</sup>

### 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](http://www.dell.com/japan_rohs).

### Materials Safety Data Sheet (MSDS)

The MSDS for this product (if applicable) can be viewed at: [Materials Safety Data Sheets at Dell.com](http://Materials Safety Data Sheets at Dell.com)

### Additional Materials Information

- The cables may use PVC as an insulating material to ensure product safety
- The case material is Sheet Metal, ABS
- Product may contain post-industrial recycled content (plastics, metal, glass)

<sup>8</sup> **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 Mechanical Plastic Parts > 25 grams and Motherboards

Part	Flame Retardant	ISO 1043-4
Motherboard	1.Halogen-chlorine 2.Halogen-Fluorine 3.Halogen-bromine	1. FR 10 for aliphatic/alicyclic chlorinated compounds. 2. FR 25 for aliphatic fluorinated compounds. 3. FFR 16 for aromatic brominated compounds
Mechanical Plastic Parts > 25 grams ABS	N/A	N/A

## XII. 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
Corrugated Cardboard	1.67
Cushion (PE)	0.28
Corrugated Cardboard (for Accessory)	0.63

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

## XIII. 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 and 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
3-V CR2032 Coin Cell	Lithium



## XIV. 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

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](http://www.euro.dell.com/recycling)
- Minimal use of non-separable connections, such as gluing and welding between different materials.
- Minimal use of composite structure materials.
- Mechanical plastic parts greater than 100 grams consist of one material or of easily separable materials.

## XV. 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](mailto:recycling_emea@dell.com) or visit [www.dell.com/recyclingworldwide](http://www.dell.com/recyclingworldwide) and select the relevant country.

## XVI. DELL CORPORATE ENVIRONMENTAL INFORMATION

Information on Dell's Environmental initiatives, policies, programs and goals can be found at [www.dell.com/environment](http://www.dell.com/environment).

Product Safety, EMC and Environmental Datasheets for Dell products are located at:  
[www.dell.com/regulatory\\_compliance\\_datasheets](http://www.dell.com/regulatory_compliance_datasheets)