

MARKETING NAME*: OptiPlex[™] 960, OptiPlex[™] 960n, OptiPlex[™] 960FLX, OptiPlex[™] 960FLX-HD Mini-Tower www.dell.com **REGULATORY MODEL: DCSM, DCSM1F REGULATORY TYPE: 08025** EFFECTIVE DATE: January 13, 2011

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Dell Inc.

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PRODUCT SAFETY¹ Ι.

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

Country/Region	Authority or Mark
Argentina	IRAM
Belarus	BELLIS
Cambodia	ISC
Canada	SCC
China	CNCA or CCC
Croatia	KONCAR
European Union	CE
Germany	TUV
IECEE	IECEE CB
Israel	SII
Kazakhstan	OTAN – CKT
Kenya	KEBS
Kuwait	KUCAS
Mexico	NYCE or NOM
Moldova	INSM
Nigeria	SONCAP
Norway	NEMKO
Russia	GOST
Saudi Arabia	KSA ICCP
	Safety Registration
Singapore	Scheme
South Africa	NRCS
Taiwan	BSMI
Ukraine	UKRTEST or
	UKRSERTCOMPUTER
United States	NFPA
United States	NRTL
Uzbekistan	STZ

^{*} 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.



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

III. ERGONOMICS, ACOUSTICS AND HYGIENICS³

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
Germany	GS
Russia	GOST

IV. 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.

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.

³ The above-listed Ergonomics, Acoustics and Hygienics 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. DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS

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

VI. 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: <u>US_Export_Classification@Dell.com</u>

VII. SYSTEM DIMENSION AND WEIGHT

Depth, cm	Width, cm	Height, cm	Weight, kg
43.1	18.7	40.8	11.5 kg (May vary with additional options installed)

VIII. 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
China: China Energy Certification Program (CECP)	CQC09701038107	Yes
USA: Energy Star 5.0 Capable	Yes	Yes
TCO'05	05:0702:5	Yes
* EPEAT	Link below for registration status	Varies by Country
Germany: Blue Angel	<u>19099</u>	Yes

* EPEAT registered where applicable/supported see product links for respective registration status by country: <u>Desktops</u>, <u>Monitors</u>, <u>Notebooks</u>, <u>Workstation-Desktops</u>, and <u>Workstation-Notebooks</u>.

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 (<u>http://www.eicc.info/</u>)

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

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 <u>www.dell.com/chinarohs</u>.

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 <u>here</u>.

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

IX. PERFORMANCE DATA

System Configuration

The Energy Consumption data is based on a configuration including:

Processor	(1) Intel E8400 3.0 GHz
Hard Drive(s)	(1) 160GB 7200RPM drive
Memory	(2) 1GB DIMMs
CD-ROM	(1) 16x DVD+/-RW
FDD	(1) 1.44" FDD
Graphics	(1) add-on graphic card (OUGA6)
Power Supply	305 Watt

Energy Consumption⁴

Service Level	Energy Consumption (Wattage)	Heat Dissipation (BTU/hr). AUTOMATICALLY CALCULATED	Description of Service Level
Minimum	45	153.90	The system is tested in compliance to Energy Star 5.0 "idle" mode.
ACPI S3	2.19	7.48	The system is in a low-power sleep mode otherwise known as "Standby" or "Suspend to Ram".
Off: Low Power Mode Disabled	1.18	4.03	System is turned off. if the Low power Mode feature is available, it is disabled via the BIOS.
Off: Low Power Mode Enabled	0.85	2.90	System is turned off with the Low power Mode feature enabled via the BIOS.

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).

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.

Dell's Energy Calculator can keep you in the know on how changes in power management settings and more efficient hardware options can positively impact energy costs, and can help you optimize your infrastructure for high efficiency. Please see Dell's Client Energy Savings Calculator <u>here</u>.

⁴ 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.



Dell's OptiPlex 960 Technical Guidebook contains additional information related to power consumption and power supply efficiency and is available <u>here</u>.

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

Low-End Configuration Acoustic Data

Operation	ldle	HDD Operating	ODD Operating
Average Sound Power (L _{WAm})	35.2	35.2	48.7
Correction K	3.0	3.0	3.0
Declared Sound Power (L _{WAd})	3.8	3.8	5.2

The Declared Noise Emission in accordance with ISO 9296 for the Dell OptiPlex 960 is as follows: (all values in decibels except LWAd, which is expressed in bels; 1 bel=10 decibels, re 10-12 Watts).

Note: Declared Sound Power rounded to nearest tenth of a bel per ISO 9296 section 4.4.2.

The Declared A-weighted Sound Pressure Level (Awtd) in decibels (re 2x10⁻⁵ Pa), at Operator and Bystander Positions are measured in accordance with ISO 7779 7.6.1 and 7.6.2 and declared in accordance with ISO 9296 for this product is as follows:

Table Top:

Operation	ldle	HDD Operating	ODD Operating
Operator Position (L _{pA})	29	29	40
Bystander Position (L _{pA})	24	24	33

Floor-Standing (Deskside):

Operation	ldle	HDD Operating	ODD Operating
Operator Position (L _{pA})	21	22	36
Bystander Position (L _{pA})	21	21	33

Note: Declared Sound Pressure rounded to nearest whole number of decibels as per ISO 9296 section 4.4.4.



High-End Configuration Acoustic Data

Operation	ldle	HDD Operating	ODD Operating
Average Sound Power (L _{WAm})	36.9	36.8	47.5
Correction K	3.0	3.0	3.0
Declared Sound Power (L _{WAd})	4.0	4.0	5.2

The Declared Noise Emission in accordance with ISO 9296 for the Dell OptiPlex 960 is as follows: (all values in decibels except LWAd, which is expressed in bels; 1 bel=10 decibels, re 10-12 Watts).

Note: Declared Sound Power rounded to nearest tenth of a bel per ISO 9296 section 4.4.2.

The Declared A-weighted Sound Pressure Level (Awtd) in decibels (re 2x10⁻⁵ Pa), at Operator and Bystander Positions are measured in accordance with ISO 7779 7.6.1 and 7.6.2 and declared in accordance with ISO 9296 for this product is as follows:

Table Top:

Operation	ldle	HDD Operating	ODD Operating
Operator Position (L _{pA})	31	31	43
Bystander Position (L _{pA})	26	27	37

Floor-Standing (Deskside):

Operation	ldle	HDD Operating	ODD Operating
Operator Position (L _{pA})	23	23	37
Bystander Position (L _{pA})	22	23	35

Note: Declared Sound Pressure rounded to nearest whole number of decibels as per ISO 9296 section 4.4.4.



X. PRODUCT MATERIALS INFORMATION⁵

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: <u>www.dell.com/japan_rohs</u>.

Additional Materials Information

- The cables may use PVC as an insulating material to ensure product safety
- The case material is Sheet Metal and ABS
- Chassis will contain at least 10% post-consumer recycled plastic after December 1st, 2008

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

Part	Flame Retardant	ISO 1043-4
Motherboard	TBBPA	FR (16)
Mechanical Plastic Parts > 25		
grams:		
PC-GF (20%)	Bromine and Chlorine Free	>PC-20%GF<
PCR ABS	None	>ABS<
PCR PC-ABS	Bromine and Chlorine Free	>PC+ABS FR(40)<

⁵ Waste Handling. Local regulations should be observed when disposing of this product due to the presence of the materials and substances as listed above.



XI. 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	2.16	
LDPE	0.23	

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

XII. 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
3-V CR2032 lithium coin-cell	Lithium

XIII. 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 <u>www.euro.dell.com/recycling</u>
- Minimal use of non-separable connections, such as gluing and welding between different materials.
- Mechanical plastic parts greater than 100 grams consist of one material or of easily separable materials.

XIV. 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.



XV. DELL CORPORATE ENVIRONMENTAL INFORMATION

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

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