

MARKETING NAME\*: OptiPlex™ FX160, OptiPlex™ FX160n

REGULATORY MODEL: DC01T REGULATORY TYPE: 08032

**EFFECTIVE DATE: January 13, 2011** 

TABLE OF CONTENTS FOR PRODUCT SAFETY, EMC & ENVIRONMENTAL DATASHEET

Regulatory Environmental

I. Product Safety
 II. Electromagnetic Compatibility
 VII. System Dimension and Weight
 VIII. Declarations and Certifications

III. <u>Ergonomics, Acoustics, and Hygienics</u> IX. <u>Performance Data</u>

IV. Power Cords and User Documentation
 V. Datasheet Responsible Party Name and Address
 X. Product Materials Information
 XI. Packaging

V. <u>Datasheet Responsible Party Name and Address</u> XI. <u>Packagin</u> VI. <u>Trade Import/Export Compliance Data</u> XII. <u>Batteries</u>

XIII. <u>Design for Environment</u>

XIV. Recycling/End-of-Life Service Information
XV. Dell Corporate Environmental Information

Dell Inc.

www.dell.com

## 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
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
	UKRTEST or
Ukraine	UKRSERTCOMPUTER
United States	NFPA
United States	NRTL
Uzbekistan	STZ

<sup>\*</sup> 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.

<sup>&</sup>lt;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.



#### **ELECTROMAGNETIC COMPATIBILITY<sup>2</sup>** II.

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

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

#### ERGONOMICS, ACOUSTICS AND HYGIENICS<sup>4</sup> III.

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

### 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.

<sup>&</sup>lt;sup>2</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>&</sup>lt;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>&</sup>lt;sup>4</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.



### 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

Regulatory\_Compliance@Dell.com

### 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: US\_Export\_Classification@Dell.com

### VII. SYSTEM DIMENSION AND WEIGHT

Depth, cm	Width, cm	Height, cm	Weight, kg
25.3	8.9	26.4	4.5 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:

point of paromaco.		
Approvals	Certificate #	Yes / No / N/A
China: China Energy Certification Program (CECP)	TBD	TBD
USA: Energy Star 5.0 Capable	N/A	Yes
TCO'05	05:0809:11	Yes
* EPEAT	Link below for registration status	Varies by Country

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

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 (http://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 <a href="https://www.dell.com/rohsinfo">www.dell.com/rohsinfo</a>.

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 <a href="https://www.dell.com/chinarohs">www.dell.com/chinarohs</a>.

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 <a href="https://www.dell.com/REACH">www.dell.com/REACH</a>

Dell's Energy Star qualified products are listed on the EPA website here

### IX. PERFORMANCE DATA

## **System Configuration**

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

Б	1.4.14.7014.000.4.0014
Processor	Intel ATOM 230, 1.6GHz
Hard Drive - Config	2.5" 80GB (7200 RPM)
1	,
Hard Drive - Config	2GB NVRAM Flash Memory for embedded operating system storage
2	
Memory	4GB
Power Supply	50 Watt Internal Power Supply

Energy Consumption<sup>5</sup> with hard drive Configuration 1

Service Level	Energy Consumption (Wattage)	Heat Dissipation (BTU/hr). AUTOMATICALLY CALCULATED	Description of Service Level
Maximum	21.63	73.97	The system is running programs to maximize the power consumption
Minimum	18.32	62.65	The system is tested in compliance to Energy Star 4.0 "idle" mode.
ACPI S3	3.30	11.29	The system is in a low-power sleep mode otherwise known as "Standby" or "Suspend-to-Ram".
ACPI S4	3.34	11.44	The system is in a low-power sleep mode otherwise known as "Hibernate" or "Suspend-to-Disk".
Off: Low Power Mode disabled	1.63	5.59	System is turned off. If the Low power Mode feature is available, it is disabled via the BIOS.
Off: Low Power Mode enabled	1.45	4.96	System is turned off with the Low power Mode feature enabled via the BIOS.

<sup>&</sup>lt;sup>5</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.



Energy Consumption with NVRAM flash storage Configuration 2

Service Level	Energy Consumption (Wattage)	Heat Dissipation (BTU/hr).	Description of Service Level
Maximum	Benchmark did not support  NVRAM utilization		The system is running programs to maximize the power consumption
Minimum	16.61	56.68	The system is tested in compliance to Energy Star 4.0 "idle" mode.
ACPI S3	2.73	9.32	The system is in a low-power sleep mode otherwise known as "Standby" or "Suspend-to-Ram".
Off: Low Power Mode disabled	1.65	5.63	System is turned off. if the Low power Mode feature is available, it is disabled via the BIOS.
Off: Low Power Mode enabled	1.45	4.96	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: <a href="http://oahu.lbl.gov/index.html">http://oahu.lbl.gov/index.html</a>.

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 <a href="here">here</a>.

Declared Noise Emissions in accordance with ISO 9296 (tested in accordance with ISO 7779) Configuration 1

Service Level	Sound Pressure Operator Position (LpAm, decibels) (re 2x10-5 Pa)
Hard Drive Accessing	20 dBA
Idle	20.9 dBA



## X. PRODUCT MATERIALS INFORMATION<sup>6</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.

### **Additional Materials Information**

• The cables may use PVC as an insulating material to ensure product safety

The case material is PC+ABS

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

- 141110 1 to 1411 1		
Part	Flame Retardant	ISO 1043-4
Motherboard	TBBP-A	FR (16)
Mechanical Plastic Parts > 25 gran	ns:	
PC	None	>PC<
PC+ABS	Triphenyl phosphate	>PC+ABS FR(40)<

<sup>-</sup>

<sup>&</sup>lt;sup>6</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.



### 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
EPE	0.47
EPE BAG	0.0006
Carton	1.3

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 <a href="https://www.euro.dell.com/recycling">www.euro.dell.com/recycling</a>
- 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 <a href="mailto:recycling-emea@dell.com">recycling-emea@dell.com</a> or visit <a href="mailto:www.dell.com/recyclingworldwide">www.dell.com/recyclingworldwide</a> and select the relevant country.



## XV. DELL CORPORATE ENVIRONMENTAL INFORMATION

Information on Dell's Environmental initiatives, policies, programs and goals can be found at <a href="https://www.dell.com/environment">www.dell.com/environment</a>.

Product Safety, EMC and Environmental Datasheets for Dell products are located at: www.dell.com/regulatory\_compliance\_datasheets

Page 8