



**PRODUCT: Display E190S**  
**REGULATORY MODEL: E190Sf**  
**EFFECTIVE DATE: January 26, 2011**

**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
Argentina	TUV-IRAM
Belarus	BELLIS
Cambodia	ISC
Canada	SCC
China	CNCA or CCC
Croatia	KONCAR
European Union	CE
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
Serbia	KVALITET
Singapore	Safety Registration Scheme
South Africa	NRCS
Taiwan	BSMI
Ukraine	UKRTEST or UKRSERTCOMPUTER
United States	NRTL
Uzbekistan	STZ

<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.



## II. ELECTROMAGNETIC COMPATIBILITY<sup>2</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
Australia / New Zealand	ACMA 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
Russia	GOST	Class B
South Africa	SABS	Class B
South Korea	KCC	Class B
Taiwan	BSMI	Class B
Ukraine	UKRTEST or UKRSERTCOMPUTER	Class B
United States	FCC	Class B
Uzbekistan	STZ	Class B

## III. ERGONOMICS, ACOUSTICS AND HYGIENICS<sup>3</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
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.

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

<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>3</sup> 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.



VI. SYSTEM DIMENSION AND WEIGHT

Depth, cm	Width, cm	Height, cm	Weight, kg
14.4	41.2	41.1	3.94 (May vary with additional options installed)

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
USA: Energy Star Capable	N/A	Yes
USA: * EPEAT	Link below for registration status	Varies by Country
Nordic: TCO 03 (monitors only)	03:0901:1385	Yes
China: China Energy Certification Program (CECP)	CQC09701028984	Yes

\* 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 [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, see [www.dell.com/chinarohs](http://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](http://www.dell.com/REACH)

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



## VIII. PERFORMANCE DATA

### Energy Consumption<sup>4</sup>

Service Level	Energy Consumption (Wattage)	BTU Calculation	Description of Service Level
*Maximum	19.32	66.0744	The system is running programs to maximize the power consumption.
On Mode	17.31	59.2002	The product is connected to a power source and produces an image.
Sleep Mode	0.38	1.2996	The reduced power state the display enters after receiving instructions from a content source (e.g. computer, game console, or set-top box), or via other functions (e.g. timers or sensors). A blank screen and reduction in power consumption characterize this mode. The display returns to On Mode with full operational capability upon sensing a signal from a source or function that can initiate that can initiate the reduced power state.
Off	0.31	1.0602	The system is turned off but is still connected to its AC power source.

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>4</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.



## IX. PRODUCT MATERIALS INFORMATION<sup>5</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).

### Additional Materials Information

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

### Mercury Information

Number of bulbs	Average per bulb
2	< 3 mg

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

Part	Flame Retardant	ISO 1043-4
Motherboard	N/A	N/A

<sup>5</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.



## 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
Carton	1.22
Paper	0.15
HDPE	0.06

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

## XI. 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.

## XII. 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.

## XIII. 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)