

MARKETING NAME.....PowerEdge™ R415 REGULATORY MODEL.....E07S

REGULATORY TYPE......E07S003 EFFECTIVE DATE......May 26, 2014

EMC EMISSIONS CLASS...A

Dell Inc. www.dell.com

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STATEMENT OF COMPLIANCE

This product has been determined to be compliant with the applicable standards, regulations, and directives for the countries where the product is marketed. The product is affixed with regulatory marking and text as necessary for the country/agency. Generally, Information Technology Equipment (ITE) product compliance is based on IEC and CISPR standards and their national equivalent such as Product Safety, IEC 60950-1 and European Norm EN 60950-1 or EMC, CISPR 22/CISPR 24 and EN 55022/55024. Dell products have been verified to comply with the EU RoHS Directive 2011/65/EU. Dell products do not contain any of the restricted substances in concentrations and applications not permitted by the RoHS Directive.

EMC Emissions Class refers to one of the following use environments:

- EMC Class B products are intended for use in residential/domestic environments but may also be used in non-residential/non-domestic environments.
- EMC Class A products are intended for use in non-residential/non-domestic environments. Class A products may also be utilized in residential/domestic environments but may cause interference and require the user to take adequate corrective measures.

For Product Safety and EMC compliance, this product has been assigned a unique regulatory model and regulatory type that is imprinted on the 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. ErP compliance is tied to the CE mark.

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals, 1907/2006) is the European Union's (EU) chemical substances regulatory framework. Dell complies with the REACH directive. For information on SVHC (Substances of Very High Concern), see www.dell.com/REACH.

Compliance documentation, such as certification or Declaration of Compliance for the product is available upon request to regulatory_compliance@dell.com. Please include product identifiers such as marketing name, regulatory module, regulatory type and country that compliance information is needed in request.



I. GLOBAL ENVIRONMENTAL INFORMATION

Environmental (Voluntary Marks)								
Country Approval Compliance								
China	CECP	Yes						
China	CEC	Yes						

II. 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.

III. DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS

Dell Inc.

Department: Global Regulations and Standards

MS: PS4-30

Round Rock, Texas 78682, USA Regulatory_Compliance@Dell.com

IV. TRADE (IMPORT/EXPORT) COMPLIANCE DATA

For any questions related to importing & exporting classification of Dell products, please obtain information from the following link: www.dell.com/import_export_compliance or send request to www_Export_Compliance@dell.com

V. SYSTEM DIMENSION AND WEIGHT

Depth,	Width,	Height,	Weight, kg
cm	cm	cm	
62.70	43.40 (without rack latches)	4.28	15.9 Kg (maximum) 5.96 Kg (empty)

VI. PERFORMANCE DATA (ErP Lot 3 information is located in section XIII Appendix A)

Energy Consumption*

Energy efficiency benefits the environment and lowers the total cost of equipment ownership by reducing power consumption. Dell offers energy calculators that help estimate power needs, potential emissions avoidance and potential cost savings. Click here for Dell's Client Energy Savings Calculator, Data Center Capacity Planner, and Monitor Power Savings Calculator. Information on Energy Efficiency is available here

^{*} 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. For more details visit www.dell.com/environmental_information



VII. PRODUCT MATERIALS INFORMATION¹

Information on Dell's material use is available here.

To review Dell's Restricted Material Guidance document click here.

- The case material is, metal
- This product contains 0% post-consumer recycled plastic
- Marking of plastic parts greater than 25 grams are done in accordance with ISO 11469 (see below)

Product is BFR/PVC Free ☐ Yes ■ No Flame Retardants Used in Motherboard

Part	Flame Retardant
Motherboard	ТВВРА

Flame Retardants Used in Mechanical Plastic Parts > 25 grams

Resin Material Name	Marking per ISO 1146 9:2000, 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) or Hazard Statement(s) per EU Directive 67/548/EEG or 1272/2008
PC+ABS	>PCABS FR(40)<	FR(40)	TPP(Triphenyl phosphate)	N/A
PC+ABS	>PCABS FR(40)<	FR(40)	Organo Phosphate	N/A

Mercury Information

Number of bulbs	Average per bulb
0	0

India RoHS Declaration

DECLARATION OF CONFORMITY WITH GAZETTE OF INDIA: EXTRAORDINARY, E-WASTE (MANAGEMENT & HANDLING) RULES (INDIA ROHS)

Manufacturer Name and Address: Dell Inc. One Dell Way Round Rock, Texas, USA 78682

Dell Inc. declares that all Dell branded products have been designed and manufactured in compliance with E-Waste (Management & Handling) Rules² on the reduction in the use of hazardous materials in the manufacture of electrical and electronic equipment and their maximum allowed concentrations by weight in the homogenous material (except for the exemptions listed in schedule II).

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¹ Waste Handling. Local regulations should be observed when disposing of this product due to the presence of the materials and substances as listed above.

² E-Waste (Management & Handling) Rules 2011, by the Ministry of Environment & Forests, Government of India dated May 12, 2011.



Substance	Concentration
Lead	0.1%
Mercury	0.1%
PBB (Polybrominated Biphenyls)	0.1%
PBDE (Polybrominated Diphenyl Ethers)	0.1%
Hexavalent Chromium	0.1%
Cadmium	0.01%

Compliance has been verified via internal design controls, supplier declarations, and/or analytical test data. The undersigned below possesses the complete technical documentation relating to the declaration of compliance.

For additional information please visit:

- Restricted Material Compliance <u>www.dell.com/environmental_information</u>
- Products MSDS (Material Safety Data Sheets):

Batteries:

 $\frac{http://www.dell.com/content/topics/topic.aspx/global/shared/about_dell/values/regulatory_compliance/en/dell_battery_declaration_january2011?c=us\&l=en\&s=corp\&\sim ck=anavml$

VIII. PACKAGING

Information on Dell's sustainable packaging effort available here.

Additional materials restricted in Packaging as per Dell's Restricted Material Guidance document found here.

Packaging Materials	Total Weight of each Material type, (kg)
Corrugated Fiberboard	0.406
EPE	0.330
LDPE Bags	0.15

IX. BATTERIES

Below is a listing of batteries that could be present in the product:

Battery Description – Batteries	Battery Type	Battery Weight (kg)
CR-2032 coin cell	Lithium	0.003

X. DESIGN FOR ENVIRONMENT

Dell systems are, when applicable, designed for easy assembly, disassembly, and servicing. For more information on product Recyclability please visit www.dell.com/environmental_information

XI. 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.

XIII. HELPFUL LINKS

Environmental Policy

http://i.dell.com/sites/content/corporate/corp-comm/en/Documents/dell-global-environmental-policy.pdf

Environment Website

www.dell.com/earth

• Corporate Sustainability Report

http://www.dell.com/Learn/us/en/uscorp1/report?c=us&l=en&s=corp&delphi:gr=true



ISO 14001 Certification

http://i.dell.com/sites/content/corporate/corp-comm/en/Documents/dell-iso14001-worldwide.pdf

Materials Restricted for Use

http://www.dell.com/downloads/global/corporate/environ/restricted_materials_guid.pdf

Chemical Use Policy

http://i.dell.com/sites/doccontent/corporate/environment/en/Documents/chemical-use-policy.pdf

Client Energy Calculator

 $\underline{http://www.dell.com/content/topics/topic.aspx/global/products/landing/en/client-energy-calculator? c=us\&l=en$

• Product Carbon Footprint

http://content.dell.com/us/en/corp/d/corp-comm/environment_carbon_footprint_products

RoHS Compliance

www.dell.com/rohsinfo

• REACH Compliance

www.dell.com/REACH

 Recycling Information www.dell.com/recycling

Supplier Responsibility

http://content.dell.com/us/en/corp/d/corp-comm/standards-for-suppliers.aspx

XIV. APPENDIX A: ErP Lot 3 Product (Energy Consumption) Information

The ErP Lot 3 Standard includes requirements for certain product specific information to be provided by the manufacturer. This is applicable to Desktops, Integrated Desktops, Notebooks, Tablets, Slates, Notebook Thin Clients, Desktop Thin Clients, Workstations, Mobile Workstations, Computer Servers, and Small Scale Servers.

Maximum Power (Watts)	265.00
Idle Power (Watts)	106.00
Sleep Power (Watts)	N/A
Off Power (Watts)	N/A

Power Supply Model #	Internal or External	Link to efficiency report												
		MAIN POWER ON 20% Loading: +12V/6.3 50% Loading: +12V/15.8 100% Loading: +12V/31	33Å, +3.3V/	5.34Å, +5V/5.	34Å, +12V /10.68A, +	SB/0.47A 12VSB/0.9	5A							
		Serial_No	AMB.	Vin/Feq	Output Load	lin rms(A)	Pin	Pdc	Dissipated Power	Eff	PF			
					20%	1.009	115.310	94.633	20.677	82.069	0.9927			
				115V/50Hz	50%	2.465	283.380	242.973	40.407	85.741	0.9984			
D480E-	Intornal	2H	25	25	25	25		100%	5.011	576.400	484.185	92.215	84.002	0.999
S0	Internal	211	25		20%	0.548	116.070	97.455	18.615	83.963	0.92			
				230V/50Hz	50%	1.230	278.170	242.977	35.193	87.349	0.9821			
					100%	2.454	561.160	484.206	76.954	86.287	0.9936			
			STANDBY MODE											
		Serial_No AME	AMB.	Vin/Feq	Output Load	lin rms(A)	Pin	Pdc	Dissipated Power	Eff	PF			
		2H	25	115V/50Hz	1.2A	0.419	18.765	14.464	4.301	77.080	0.3889			
		211	23	230V/50Hz	1.2A	0.310	19.289	14.466	4.823	74.995	0.2702			

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				Serial_No	AMB.	LOAD	Vin/Feq	SPEC (Min.)	Iinrms(A)	Pin	Pdc	Dissipated Power	Eff	PF		
	SO Internal			20%		86%	0.996	114.926	100.273	14.653	87.250	0.997				
DEOOE								50%	115V/60Hz	90%	2.408	276.991	250.796	26.195	90.543	0.997
		ernal		100%		88%	4.928	564.164	501.047	63.117	88.812	0.999				
-50		-50	-30	291 25	25	10%		75%	0.323	65.522	49.844	15.678	76.071	0.876		
				20%	230V/60Hz	88%	0.515	113.234	100.363	12.871	88.633	0.948				
				50%	230V/60H2	92%	1.186	271.865	250.944	20.921	92.305	0.989				
				100%		88%	2.382	549.053	501.177	47.876	91.280	0.996				

^{*} 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.

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

Servers:

Declared A-weighted sound power level of the Server	6.2 bels
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