



Product Compliance Datasheet

MARKETING NAME.....: Dell EMC PowerEdge R540

REGULATORY MODEL.....: E46S

REGULATORY TYPE.....: E46S001

EMC EMISSIONS CLASS.....: A

EFFECTIVE DATE.....: September 26, 2017

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I. 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. Dell manufacturers and markets Multimedia Equipment (MME), Information Technology Equipment (ITE), Audio Visual Equipment (A/V), Industrial, Scientific, Medical Equipment (ISM) or combinations of these. Generally, products Electromagnetic Compatibility (EMC) and Product Safety compliance is based on International IEC and CISPR standards and their national equivalent along with national standards for Radio (wireless), Telecommunications (Modem) and Energy. Dell products have been verified to comply with the Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU of the European Parliament and the Council. Dell product does 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 product is intended for use in residential/domestic environments but may also be used in nonresidential/non-domestic environments.
- EMC Class A product is intended for use in non-residential/non-domestic environments. Class A product 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 regulatory 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. Dell products with the CE marking have been verified to comply with Energy Related Products (ErP) Directive 2009/125/EC of the European Parliament and of the Council.. REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), Regulation (EC) 1907/2006 of the European Parliament and of the Council is the European Union's (EU) chemical substances regulatory framework. Dell complies with the REACH regulation. For information on SVHC (Substances of Very High Concern), see www.dell.com/REACH. This products compliance documentation, such as this datasheet and the European Union Declaration of Conformity are available on the product support page, manuals tab <http://www.dell.com/support>. Additional compliance documentation for the product is available upon email request to product_compliance@dell.com. Please include product identifiers such as marketing name, regulatory model, regulatory type and country that compliance information is needed in the email request.



II. Global Environmental Information

Environmental (Voluntary Marks)		
Country	Approval	Compliance
Global	ENERGY STAR (Configuration Dependent)	2.1
China	CECP	Yes
China	CEC	Yes
Varies by Country See EPEAT.net	EPEAT (Configuration Dependent)	Refer to EPEAT.net for specific registration levels and countries

III. Declaration of Similarity

Object of the Declaration	
Product Type	Server
Regulatory Model Number	E46S
Regulatory Type Number	E46S001
Trade Name/ Trade Mark	DELL EMC
Marketing Name(s)	PowerEdge R540

Dell Inc. hereby declares that the products identified by the product designations listed in this declaration are strictly identical in design (shape, opening, etc.) components, materials, manufacturing process, and markings except for product designation – Trade Name and/or Trade Mark as specified in this declaration.

The products may have very minor differences which do not impact the level of conformity. All products identified by the product designations in this declaration have the same level of conformity according to the certificate(s) provided.

The Trade Name / Trade Mark and/or Marketing Name(s) are the property of Dell Inc. Any differences in the product designation are for marketing purposes only.

Date of Issue	December 04, 2018		
Title	Dell Global Product Compliance and Environmental Affairs	Signature on behalf of Dell Inc.	Dell Inc. Dell Global Product Compliance and Environmental Affairs



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. Trade (Import/Export) Compliance Data

For any questions related to importing & exporting classification of Dell products, please obtain information from the following link: <http://www.dell.com/learn/us/en/uscorp1/import-export> or send email request to WW_Export_Compliance@dell.com. Please include product identifiers such as marketing name, regulatory model, regulatory type and country that compliance information is needed in the email request.

VI. Product Dimensions and Weight

Depth, mm/cm	Width, mm/cm	Height, mm/cm	Weight, kg
681.75 mm (without bezel)	482.0 mm (with rack latched) 434.0 mm (without rack latched)	86.8 mm	25.4 Kg (Max. / 8 HDDs system) 29.68 Kg (Max. / 12 HDDs system)

VII. Performance Data

ErP Lot 3 information is located in section XIII Appendix A

For additional information on ENERGY STAR models refer to the following databases:

<http://www.dell.com/learn/us/en/uscorp1/dell-environment-energy-efficiency?c=us&l=en&s=corp&cs=uscorp1>

USA: <https://www.energystar.gov/productfinder/>

* **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.

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



VIII. Product Materials Information

Information on Dell's material use is available [here](#).

Dell's Restricted Material for Use guidance document is available [here](#).

- The case material is, > Steel <
- This product contains 35% post-consumer recycled plastic/closed loop recycled plastics (Measured as a percentage of total amount of plastic (by weight) in the product as per guidance in EPEAT standard as applies to plastics parts)

Mechanical plastic parts ¹ > 25 g are BFR/PVC free	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Marking of plastics parts greater than 25 grams is in accordance with ISO 11469 (see below)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Printed circuit boards (without components) >25g are BFR PVC free ²	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Insulation materials of external electrical cables are PVC free	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Insulation materials of internal electrical cables are PVC free	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Product is BFR/PVC Free (Accessories & Options may not be BFR/PVC-Free, refer to spec ENV0199)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Flame Retardants Used in Motherboard

Part	Flame Retardant
Motherboard	TBBPA

Flame Retardants Used in Mechanical Plastic Parts > 25 grams

Resin Material Name	Marking per ISO 11469:2016	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
SABIC Cycoloy C6200	>PC+ABS FR(40)<	FR(40)	Organo Phosphate	N/A

¹ Mechanical plastic part: plastic parts that do not internally carry an electrical signal such as housings, brackets, bezels, latches, etc. that form the basic structure of the product and/or have mechanical functions. Plastic parts such as fans, connectors, printer fuser assemblies, etc. are not considered "mechanical plastic parts" in the context of this specification. Plastics parts do not contain no more than 0,1% weight (1000 ppm) bromine and 0,1% weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and polyvinyl chloride (Per Dell Spec ENV0424)

² Dell will adopt the BFR/CFR/PVC-free definition as set forth in the "INEMI Position Statement on the Definition of 'Low-Halogen' Electronics (BFR/CFR/PVC-Free)." Plastic parts contain <1000 ppm (0.1 percent) of bromine (if the Br source is from BFRs) and <1000 ppm (0.1 percent) of chlorine if the Cl source is from CFRs, PVC or PVC copolymers. All printed circuit board (PCB) and substrate laminates contain bromine/chlorine totaling less than 1,500 ppm (0.15 percent), with maximum chlorine of 900 ppm (0.09 percent) and maximum bromine of 900 ppm (0.09 percent)



Mercury Information

Number of bulbs	Average per bulb
0	0 mg

Additional information:

- RoHS and REACH declaration - see product material information section at: www.dell.com/environmental_information
- Products MSDS (Material Safety Data Sheets):
Batteries: [Battery MSDS Documentation and Declaration](#)
Printer Toner and Ink: [MSDS Documentation](#)

IX. 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, (kg)	Sustainable Material Content ³ (e.g. Recycled content *, bio-based, Sustainable Forested materials)	% Sustainable Material		
			APJ region	DAO region	EMEA region
Corrugated Fiberboard	3.92 kg	Recycled Content	Min 50%	Min 50%	Min 50%
LDPE Bags	0.82 kg	Recycled Content	0-80%	0-80%	0%

X. 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 kg
PERC Battery	Lithium Ion	0.016 kg

³ Non-wood, biobased material may include, but is not limited to: bagasse, bamboo, mushroom, straw, agricultural waste or byproduct.

* Recycled content in packaging material is supplier dependent.



XI. 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

XII. Recycling / End-of-Life Service Information

Dell systems are, when applicable, designed for easy assembly, disassembly, and servicing.
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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/environmental_information
- **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>
- **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>



A Appendix A: ErP Lot 3 Product Energy Consumption Information

European Union (EU) ErP Lot 3 (Commission Regulation (EC) No. 617/2013)

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

ErP Lot 3 provides certain exclusions based upon product type, screen size, and/or the amount of power consumed in idle mode. Product energy and acoustic information might be reported for products that are out of scope of ErP Lot 3 for informational purposes only.

Maximum Power (Watts)	328.80
Idle Power (Watts)	107.40
Sleep Power (Watts)	N/A
Off Power (Watts)	N/A

Power Supply Model #	Internal or External	Link to efficiency report
AC450E-S0	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/ESvINOUIuU9AjUzY5eFDQk4B_FozbJIAkOhw_5rBUjBvLQ
D450E-S1	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/EWDAFgUUCfNEjuXJwF_d1XEBO9cy5Qyn4PuETSN0aaYkvw
D495E-S1	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/EahlLYIT7R1Cg6rH8q1zgPgB9OYof4Eo8IQcYv1hcsLtQ
E495E-S1	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/EXMJtCSwRShDomU4e4AvSGkBPx0zvFNTN1WzWwHS7BMOZg
D750E-S3	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/EWcdO65LmUBCmoVXcHaZQeMB4m21qPtLgaa0t7qNDgNvpw
D750E-S6	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/EbtcJJQctWFGp_TTD0agNUsBc08MP0tj5_X94nLqAHNxNg
E750E-S1	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/EWE_86H2bYtMrM9238Y1twYB8SWs7BRFyQ1wngt6Lp7q4A
L750E-S0	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/Ebyc1Pg8BPVGTlh6G-V5zaEBS2Q7vd1e2PNb-E-dWdS2gw
D1100E-S0	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/EUgRsSVKYbNFIYXcxlFA7u0BJA1krNeH2ig8zfcsgzcUBA
D1100E-S4	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/Edl1-jEiav9MlruNVNpwPp4B6EMMn-rmADomCm-YLHEh-g
L1100E-S1	Internal	https://cleareresult5.sharepoint.com/:b:/s/PLS/Eczze03CZ85Ot-vx--LUAP0BY1ecys0D8fbg1igKwt4jtQ

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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 (Idle)	5.2 bels
Declared A-weighted sound power level of the Server (Operating)	5.6 bels

