

MARKETING NAME.....Alienware Aurora R5 REGULATORY MODEL.....D23M

REGULATORY TYPE......D23M001 EFFECTIVE DATE.....July 07, 2016

EMC EMISSIONS CLASS...B

Dell Inc. www.dell.com

TABLE OF CONTENTS

l.	GLOBAL ENVIRONMENTAL INFORMATION	2
II.	NFPA 99 CONFORMITY	
III.	POWER CORDS AND USER DOCUMENTATION	2
IV.	DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS	2
V.	TRADE (IMPORT/EXPORT) COMPLIANCE DATA	2
VI.	SYSTEM DIMENSION AND WEIGHT	2
VII.	PERFORMANCE DATA (ErP Lot 3 information is located in section XIV Appendix A)	2
VIII.	PRODUCT MATERIALS INFORMATION	
IX.	PACKAGING	
Χ.	BATTERIES	5
XI.	DESIGN FOR ENVIRONMENT	
XII.	RECYCLING/ END-OF-LIFE SERVICE INFORMATION	5
XIII.	HELPFUL LINKS	
XIV.	APPENDIX A: ErP Lot 3 Product (Energy Consumption) Information	6
XV.	APPENDIX B: ErP Lot 26 Network Standby (Energy Consumption) Information	7

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			
Global	ENERGY STAR (Configuration Dependent)	Spec Version 6.1	

II. NFPA 99 CONFORMITY

Select Dell systems have been tested and found to comply with the touch current requirements as defined in 10.3.5 of National Fire Protection Association standard NFPA 99:2012. The touch current does not exceed 100 μ A with ground wire intact (if a ground wire is provided) and 500 μ A with ground disconnected at 127 V AC, 60 Hz when tested in accordance with 10.3.5 of NFPA 99: 2012. To determine if this product complies with the above requirements, send a request to regulatory compliance@dell.com. Please include product identifiers such as marketing name, regulatory type and country for which compliance information is needed.

III. 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.

IV. 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

V. 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.dell.com/

VI. SYSTEM DIMENSION AND WEIGHT

Depth,	Width,	Height,	Weight, kg
mm/cm	mm/cm	mm/cm	
358.6mm	199mm	472.5mm	14.114Kg (depending upon installed options)

VII. PERFORMANCE DATA (ErP Lot 3 information is located in section XIV Appendix A)

System Configuration

The Energy Consumption data is based on a configuration including:

The Energy Consumption data is based on a configuration including.		
Processor	Intel Core i7 4.0GHz	
Hard Drive(s)	9000GB	
Memory	64GB	
Video Card	Discrete	
RMSD / Optical Drive	DVDRW	
Power Supply (Internal or External)	Internal	
Power Supply Size in Watts	850W	

Product Safety, EMC & Environmental Datasheet Revision A11



Computers:

Service Level	Energy Consumption (Wattage)	BTU Calculation	Description of Service Level		
*Maximum	399.85	1367.49	The system is running programs to maximize the power consumption.		
Idle Mode 68.97 235.89		235.89	As specified EPA Energy Star Computer mode.		
S3 "Sleep" Mode 2.71 9.26		9.26	Suspend-to-RAM (low-power/sleep mode)		
Off	0.50	1.72	System is turned off but still connected to its AC power source. If the product is a computer, the Low Power Mode feature is enabled via BIOS if available.		
External Power Supply "No-Load" (if applicable)		0.00	AC adapter connected to mains with system detached otherwise known as "No-load" condition.		

^{*} 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

VIII. 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, > PC+ABS < , > ABS <
- 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	TBBP-A

^{*} 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

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.



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
PBT4130	>PBTGF30 FR(17)<	FR(17)	Halogenated compound	N/A
PBT5630	>PBT-GF30 FR(40)<	FR(40)	Organo Phosphate	N/A
PBT F202G30	> PBT-GF30 FR(30+40) <	FR(30+40)	P-Type+N-Type	N/A
Bayer(FR3005)	>PC+ABS- FR(40)<	FR(40)	BDP	N/A

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).

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: Battery MSDS Documentation and Declaration

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



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.

				
De also piero Mataviale	Total Weight	% of Post-Consumer Recycled Content (PCR)		
	of each			
Packaging Materials	Material	APJ region	DAO region	EMEA region
	type, (kg)			
Corrugated Fiberboard	3.371	25% min	25% min	25% min
EPE	0.386	0	0	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	0.0032

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

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

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. 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.

Category	Category B	Category D
Processor Speed in GHz	3.7	4
Number of Cores	2	4
Total Installed System Memory in GB	32	32
Graphics	G7	G7
WOL enabled in "Sleep" Mode	No	No
WOL enabled in "Off" Mode	No	No
As Tested: Lowest Power State	0.50	0.50
As Tested: Poff(W) WOL Disabled	0.50	0.50
As Tested: Poff(W) WOL Enabled		
As Tested: Psleep(W) WOL Disabled	3.01	2.71
As Tested: Psleep(W) WOL Enabled		
As Tested: Pidle(W)	63.96	68.97
Base TEC Limit (kWh)	158	211.00
TEC Adders Limit (kWh)	280.00	280.00
Base + Adders TEC Limit (kWh)	438.00	491.00
Results TEC	227.83	245.29

Power Supply Model #	Internal or External	Link to efficiency report
AC460AM-01	Internal	NA NA
D460AM-03	Internal	NA NA
HU460AM-01	Internal	NA NA
AC460EM-01	Internal	http://www.plugloadsolutions.com/psu_reports/DELL%20INC_AC460EM-01_460W_ECOS%204489_Report.pdf
D460EM-00	Internal	http://www.plugloadsolutions.com/psu_reports/DELL%20INC_D460EM-00_460W_ECOS%204509_Report.pdf
D850EF-00	Internal	http://www.plugloadsolutions.com/psu_reports/DELL,INC_D850EF-00_850W_ECOS%203949_Report.pdf
HU850EF-00	Internal	http://www.plugloadsolutions.com/psu_reports/DELL%20INC_(DELL)HU850EF- 00_850W_ECOS%203978_Report.pdf

^{*} 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



Internal Power Supplies (not tested by ECOVA)

Computer servers all multi-output (AC-DC) power supplies

Power Supply Model #	20% Load		50% Load		100% Load	
	Efficiency	Power Factor	Efficiency	Power Factor	Efficiency	Power Factor
AC460AM-01	NA	NA	NA	NA	80.56%	0.9808
D460AM-03	NA	NA	NA	NA	79.90%	0.9727
HU460AM-01	NA	NA	NA	NA	81.42%	0.9359
AC460EM-01	84.92%	0.9891	86.40%	0.9883	82.52%	0.995
D460EM-00	85.17%	0.9902	85.48%	0.9931	82.59%	0.9961
D850EF-00	86.98%	0.98	87.61%	0.99	82.96%	0.99
HU850EF-00	86.45%	0.99	87.48%	1.00	83.41%	1.00

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

Computers Category B:

Service Level	Sound Power (L _{WAd} , bels) (1 bel=10 decibels, re 10 ⁻¹² Watts)	Sound Pressure Bystander Position (L _{pAm} , decibels) (re 2x10 ⁻⁵ Pa)
Hard Drive Accessing	3.4	17.8
Optical Drive Accessing	4.7	30.8
Idle	3.4	17.8

Computers Category D:

ipartoro cartegory 2:						
	Sound Power	Sound Pressure				
Service Level	(L _{WAd} , bels) (1 bel=10 decibels,	Bystander Position				
	re 10 ⁻¹² Watts)	(L _{pAm} , decibels) (re 2x10 ⁻⁵ Pa)				
Hard Drive Accessing	4.0	23.3				
Optical Drive	4.8	31.4				
Accessing	4.0	31.4				
Idle	4.0	23.5				

XV. APPENDIX B: ErP Lot 26 Network Standby (Energy Consumption) Information

The ErP Lot 26 Standard includes Network Standby power requirements to be provided by the manufacturer. This is applicable to multiple product categories. If no information is reported, it's assumed it is out of scope of ErP Lot 26.

^{*} 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