

# Technical Documentation of (EU) No 617/2013

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| Product type   | Notebook computer   |                |
| Product category   | A   | B              |
| Manufacturer name, address   | Acer Italy s.r.l,<br>Via Lepetit, 40, 20020 Lainate (MI) Italy      |                |
| Product model number   | Aspire E5-531;<br>Aspire E5-571;<br>Aspire EK-571;<br>Aspire V3-572 |                |
| Year of manufacture  | 2014  |                |
| E <sub>TEC</sub> allowance with capability adjustments when discrete graphics cards are disabled (from 1 July 2014)    | 37.6 kWh/year   | 52.8 kWh/year  |
| E <sub>TEC</sub> allowance with capability adjustments when discrete graphics cards are enabled (from 1 July 2014)     | Not applicable  | 64.8 kWh/year  |
| E <sub>TEC</sub> allowance with capability adjustments when discrete graphics cards are disabled (from 1 January 2016) | 28.6 kWh/year   | 40.8 kWh/year  |
| E <sub>TEC</sub> allowance with capability adjustments when discrete graphics cards are enabled (from 1 January 2016)  | Not applicable  | 52.8 kWh/year  |
| Whether all discrete graphics card are enabled during the test   | Not applicable  | No             |
| Whether switchable graphics mode with UMA is driving the display during the test                                       | Not applicable  | Yes            |
| E <sub>TEC</sub> of highest power-demanding configuration  | 17.33 kWh/year  | 16.71 kWh/year |
| Idle state power demand  | 7.93 Watt   | 7.93 Watt      |
| Sleep mode power demand  | 0.55 Watt   | 0.54 Watt      |
| Sleep mode with WOL enabled power demand   | 0.55 Watt   | 0.54 Watt      |
| Off mode power demand  | 0.3 Watt  | 0.26 Watt      |
| Off mode with WOL enabled power  | 0.3 Watt  | 0.26 Watt      |
| Maximum power demand   | Not applicable  | Not applicable |
| Internal power supply (IPS) efficiency at 10 %, 20 %, 50 % and 100 % of rated output power                             | Not applicable  | Not applicable |
| External power supply's (EPS) average active efficiency  | 86.45%  | 87.80%         |
| Noise levels (the declared A-weighted sound power level, L <sub>WAd</sub> ) of idle mode                               | 2.9 B   | 2.9 B          |

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| Noise levels (the declared A-weighted sound power level, $L_{WA(d)}$ ) of "HDD random seek" mode | 2.9 B   | 2.9 B      |
| Minimum number of loading cycles that the batteries can withstand                                | 400 cycles  | 400 cycles |
| Configuration of memory  | 2~ 16 GB  | 2~ 16 GB   |
| Configuration of internal storage  | 1 piece   | 1 piece    |
| Configuration of discrete television tuner   | 0 piece   | 0 piece    |
| Configuration of discrete audio card   | 0 piece   | 0 piece    |
| Configuration of discrete graphics cards   | 0 piece   | 1 piece    |
| Configuration of discrete graphics cards category  | Not applicable  | G1         |
| The battery in this product cannot be easily replaced by users themselves                        | No  | No         |
| For products with an integrated display, the total content of mercury is                         | 0 mg  | 0 mg       |
| Measurement methodology for $E_{TEC}$  | <p>COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers:</p> <p>ANNEX II Ecodesign requirements and timetable:</p> <p>1.3.1. <math>E_{TEC}</math> formula.</p>        |            |
| Measurement methodology for idle mode  | <p>EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption:</p> <p>5.2. Test setup;</p> <p>5.3.4. Measuring long idle mode;</p> <p>5.7. True RMS watt meter specification;</p> <p>5.8. True RMS watt meter accuracy;</p> <p>Annex E.2 (informative) ENERGY STAR® V5 compliant testing methodology.</p> |            |

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| Measurement methodology for sleep mode     | EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption:<br>5.2. Test setup;<br>5.3.3. Measuring sleep mode;<br>5.4. Test conditions;<br>5.7. True RMS watt meter specification;<br>5.8. True RMS watt meter accuracy. |
| Measurement methodology for off mode       | EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption:<br>5.2. Test setup;<br>5.3.2. Measuring off mode;<br>5.4. Test conditions;<br>5.7. True RMS watt meter specification;<br>5.8. True RMS watt meter accuracy.   |
| Measurement methodology for IPS efficiency | Not applicable  |
| Measurement methodology for EPS efficiency | EN 50563:2011 External a.c.—d.c. and a.c.—a.c. power supplies — Determination of no-load power and average efficiency of active modes.  |

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| <p>Measurement methodology for noise level</p>   | <p>ECMA-109 2<sup>nd</sup> edition (December 1987)<br/>Declared Noise Emission Values of Computer and Business Equipment:<br/>4. Determination of the declared noise emission values.</p> <p>ECMA-74 11<sup>th</sup> edition (December 2010)<br/>Measurement of Airborne Noise emitted by Information Technology and Telecommunications Equipment:<br/>5. Installation and operating instructions;<br/>6. Method for determination of sound power levels of equipment in reverberation test rooms;<br/>7. Method for determination of sound power levels of equipment under essentially free-field conditions over a reflecting plane;<br/>Annex C.15 Equipment category: personal computers and workstations.</p> |
| <p>Measurement methodology for battery loading cycles</p>                              | <p>EN 61960:2011 Secondary cells and batteries containing alkaline or other non-acid electrolytes — Secondary lithium cells and batteries for portable applications:<br/>7.6.1 General;<br/>7.6.3 Endurance in cycles (accelerated test procedure).</p>  |
| <p>Sequence of steps for achieving a stable condition with respect to power demand</p> | <p>EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption:<br/>5.2. Test setup;<br/>5.3.2. Measuring off mode;<br/>5.3.3. Measuring sleep mode;<br/>5.3.4. Measuring long idle mode.</p>   |
| <p>Description of how sleep mode was selected or programmed</p>                        | <p>EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption:<br/>5.2. Test setup;<br/>5.3.3. Measuring sleep mode.</p>   |

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| Description of how off mode was selected or programmed  | EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption:<br>5.2. Test setup;<br>5.3.2. Measuring off mode.               |
| Sequence of events required to reach the mode where the equipment automatically changes to sleep mode   | ENERGY STAR® Program Requirements Product Specification for Computers, Eligibility Criteria Version 6.0, Rev. Oct-2013:<br>1.D.4 Sleep Mode.        |
| Sequence of events required to reach the mode where the equipment automatically changes to off mode   | Not applicable  |
| The length of time after a period of user inactivity in which the computer automatically reaches a power mode that has a lower power demand requirement than sleep mode | 30 minutes  |
| The length of time before the display sleep mode is set to activate after user inactivity   | 10 minutes  |
| User information on the energy-saving potential of power management functionality   | <a href="http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_users">http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_users</a> |
| User information on how to enable the power management functionality  | <a href="http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_users">http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_users</a> |
| Test parameter for ambient temperature  | 25 °C   |
| Test parameter for test voltage   | 230 V   |
| Test parameter for frequency  | 50 Hz   |
| Test parameter for total harmonic distortion of the electricity supply system   | 3 %   |
| Test parameter for information and documentation on the instrumentation, set-up and circuits used for electrical testing  | AC Power Source EXTECH 6800 SERIES<br>Power Meter YOKOGAWA WT210  |