



Building Technologies Program

Tax Deduction Qualified Software EnergyGauge Summit version 3.13

On this page you'll find information about the EnergyGauge Summit version 3.13 [qualified computer software](http://www.buildings.energy.gov/qualified_software.html) (www.buildings.energy.gov/qualified_software.html), which calculates energy and power cost savings that meet federal tax incentive requirements for [commercial buildings](http://www.buildings.energy.gov/commercial/) (www.buildings.energy.gov/commercial/).

Date Documentation Received by DOE: 23 November 2007

Statements in quotes are from the software developer.

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| Internal Revenue Code §179D (c)(1) and (d) Regulations Notice 2006-52, Section 6 requirements | |
| (1) The name, address, and (if applicable) web site of the software developer; | Florida Solar Energy Center 1679 Clearlake Road Cocoa, Florida 39922 www.energygauge.com |
| (2) The name, email address, and telephone number of the person to contact for further information regarding the software; | Dr. Muthusamy Swami swami@fsec.ucf.edu +1 (321) 638-1410 |
| (3) The name, version, or other identifier of the software as it will appear on the list; | EnergyGauge Summit version 3.13 |
| (4) All test results, input files, output files, weather data, modeler reports, and the executable version of the software with which the tests were conducted; and | Provided to DOE. |
| (5) A declaration by the developer of the software, made under penalties of perjury, that— | "On behalf of the EnergyGauge development team I certify the following:" |
| (a) The software has been tested according to ANSI/ASHRAE Standard 140-2004 Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs; | "The DOE-2.1E (v120) building simulation engine that is incorporated in EnergyGauge Summit 3.13 has been tested according to ANSI/ASHRAE Standard 140-2004 Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs." |
| (b) The software can model explicitly— | "The EnergyGauge software is fully compliant with ASHRAE 90.1-2001 and meets all of the below requirements." |
| (i) 8,760 hours per year; | "Yes." |
| (ii) Calculation methodologies for the building components being modeled; | "Yes." |
| (iii) Hourly variations in occupancy, lighting power, miscellaneous equipment power, thermostat setpoints, and HVAC system operation, defined separately for each day of the week and holidays; | "Yes." |
| (iv) Thermal mass effects; | "Yes." |

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| (v) Ten or more thermal zones; | "Yes." |
| (vi) Part-load performance curves for mechanical equipment; | "Yes." |
| (vii) Capacity and efficiency correction curves for mechanical heating and cooling equipment; and | "Yes." |
| (viii) Air-side and water-side economizers with integrated control; and | "Due to limitations of the DOE-2.1E (v120) simulation engine, only air side economizers can be modeled. EnergyGauge Summit 3.13 cannot, therefore, fulfill the water-side economizer requirement, and may not be used in such cases." |
| (c) The software can— | |
| (i) Either directly determine energy and power costs or produce hourly reports of energy use by energy source suitable for determining energy and power costs separately; and | "Yes." |
| (ii) Design load calculations to determine required HVAC equipment capacities and air and water flow rates. | "Yes." |

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