



Building Technologies Program

Tax Deduction Qualified Software

EnergyGauge Summit version 3.14

On this page you'll find information about the EnergyGauge Summit version 3.14 [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: 21 December 2007

Statements in quotes are from the software developer.

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 3.14
(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 3.14 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."

(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 3.14 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."

Date Posted: 21 December 2007

Tax Deduction Qualified Software — www.buildings.energy.gov/qualified_software.html