



Guidance on the UPS ENERGY STAR® Test Method

Last Update: December 12, 2013

Dear ENERGY STAR Uninterruptible Power Supply (UPS) Partner or Other Stakeholder:

On May 10, the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) published the Final UPS ENERGY STAR Test Method following an extensive development process that involved industry stakeholders. Since then, stakeholders have submitted additional questions on the test method and DOE has decided to provide further guidance on the Final UPS ENERGY STAR Test Method:

Topic	Additional Guidance
General	All settings that are not explicitly covered in the UPS ENERGY STAR Test Method should be left in their as-shipped (e.g. default) configuration.
Section 3.B – 3-phase and single-phase power	UPSs that support both 3-phase and single-phase input power shall be tested using 3-phase power.
Section 3.D – Dc-output voltage for test	If the Dc-output UPS is unable to operate at the designated voltage for test from Table 2, the output voltage used shall be the highest normal operating voltage supported by the UPS.
Section 5.B – steady-state check at 0% load	The steady-state check only applies to the stability of the conversion efficiency under active loads. Thus, the steady-state check is not necessary for the 0% load condition. However, the UPS shall still be thermally stabilized after 125% of the manufacturer-specified stabilization time for 0% load, as described in section 5.B, before the power measurement performed in 5.C.
Section 5.C.2 – measurement period	To allow for flexibility, energy measurements may be taken for greater than 15 minutes. In this case, the calculation of P_{AVG} using Equation 1 shall use the actual measurement period for t . DOE data indicate that measurement durations greater than 15 minutes will not affect the resulting average efficiency.

Thank you for your support, and please direct any test method questions to Bryan.Berringer@ee.doe.gov.

Sincerely,

Bryan Berringer

DOE Test Method Lead for ENERGY STAR UPS Program