

Computer Servers

Summary of proposed Triple E eligibility criteria changes.

To facilitate a refinement of the eligibility criteria for Computer Servers it is proposed to make the following amendments:

- Change to the definition of Computer Servers
- Condition 4 Minimum server active state efficiency is measured and calculated in line with EU regulations (EU) 2019/424 Ecodesign requirements for servers and data storage products.
- Table 1 introduced to set minimum AC-DC PSU efficiency and power factor requirements
- Table 2 introduced to set minimum server active state efficiency score

The proposed eligibility criteria document is contained on the following pages.

Please follow this link to view the currently published eligibility criteria.



Triple E Eligibility Criteria

Category: Information and Communications Technology (ICT) Technology: Computer Servers

A computer server is defined as a computing product that provides services and manages networked resources for client devices, such as desktop computers, notebook computers, desktop thin clients, internet protocol telephones, smartphones, tablets, tele-communication, automated systems or other servers, primarily accessed via network connections, and not through direct user input devices, such as a keyboard or a mouse and with the following characteristics:

- (a) designed to support server operating systems (OS) and/or hypervisors, and targeted to run user-installed enterprise applications;
- (b) supports error-correcting code and/or buffered memory (including both buffered dual inline memory modules and buffered on board configurations);
- (c) all processors have access to shared system memory and are independently visible to a single OS or hypervisor;

A rack mounted server is designed for deployment in a standard 19-inch data centre rack as defined by EIA-310, IEC 60297, or DIN 41494 and excludes blade servers

A blade server is designed for deployment in a blade chassis with which it depends for resources (eg power supply, cooling).

Computer Server Eligibility Criteria

To be included on the Triple E Product Register, the specific computer server product must meet all the relevant requirements set out below

Note: Supporting documentation that clearly demonstrates Triple E compliance according to the conditions below will be required as part of the Triple E checking process. Detailed information on the types of documents accepted can be found in the separate Supporting Documentation guidelines

No.	Condition
1.	Marketed and sold as a rack server or blade server and not marketed or sold as a high-performance computer server or optimised for augmented, artificial intelligence, or deep learning applications.
2.	Is sold packaged with a PSU
3.	Offer power management that is enabled by default
4.	Meets PSU efficiency requirements in Table 1





5. Meets Active efficiency server requirements in Table 2

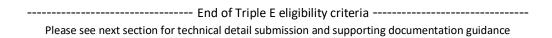
Table 1. Minimum AC-DC PSU efficiency and power factor requirements (if applicable)

	Minimum PSU efficiency			Minimum power factor	
% of rated load	10 %	20 %	50 %	100 %	50 %
Multi output	_	90 %	94 %	91 %	0,95
Single output	90 %	94 %	96 %	91 %	0,95

Table 2. Minimum server active state efficiency score

Product type	Minimum Eff _{server}				
One installed processor					
1P Server	12.0				
Two installed processors					
2P Rack server	15.0				
2P Blade server	16.0				
Four installed processors					
4P servers	18.0				

Minimum server active state efficiency should be measured and calculated in line with Commission Regulation (EU) 2019/424 ecodesign requirements for servers and data storage products.





The following information is not part of the official criteria document published within the relevant statutory Instrument; it has been added here for guidance purposes only in order to provide assistance with the submission of product details and the provision of the required supporting documentation.

Note: All information contained within this guidance document is subject to change without notice

Supporting documentation required

Described below is the list of documents that are accepted as proof of compliance for each specific Computer Servers condition.

Note: This information will only be requested AFTER you submit your product's basic details online

Important Notes to Product Providers

You must read this entire document prior to submitting products to the SEAI system, including the "Important Notes to Product Providers" section at the end of this document prior to submitting documentation.

All documentation supporting the product submission must clearly reference the correct product name and/or product code being submitted. The correct page number(s) must be detailed with each document supporting the submission.





No.	Condition	Supporting Documentation Requirement
1	Marketed and sold as a rack server or blade server and not marketed or sold as a high-performance computer server or optimised for augmented, artificial intelligence, or deep learning applications.	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.
2	Is sold packaged with a PSU	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.
3	Offer power management that is enabled by default	Official and published manufacturer's technical data sheet or brochure that demonstrates compliance with the requirements of the condition.
4	Meets PSU efficiency requirements in Table 1	Test report completed according to EPRI Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies Revision 6.6 (April, 2012) or in conformity with (EU) 2019/424
5	Meets Active efficiency server requirements in Table 2	Test report completed according to ISO 21836:2020 or in conformity with Commission Regulation (EU) 2019/424





Important Notes to Product Providers

General

There should be a clear link between all supporting documentation supplied and the product being submitted. This will typically take the form of a product code or product name that can be cross referenced between the submitted product and relevant supporting documentation. If product codes / names have been changed since publication of the supporting documentation, then official evidence of this must be provided with the supporting documentation supplied.

Any deviation from these requirements will result in the supporting documentation not being considered adequate for the purposes of demonstrating compliance with the criteria conditions. This will in turn delay the submission and/or result in the product not being considered eligible.

Where the Triple E criteria or help documentation references compliance to appropriate rather than specific standards, the onus is on the product provider to ensure that supporting documentation supplied references recognised standards that apply to the submitted product, i.e. the product must be covered under the scope of a recognised standard.

If any product submitted is later found not to meet the performance or specification criteria, then this product will cease to be considered eligible for the Triple E.

Note: When supplying the supporting documentation through the online process you must ensure that the correct page number(s) of the document is referenced when demonstrating compliance with the relevant condition. An explanatory note should also be given where more than one page number is referenced.





Test Report

A test report must include an outline of the complete test, including:

- √ Introduction
- $\sqrt{}$ Details on test conditions
- $\sqrt{}$ The specific model details of the product tested
- $\sqrt{}$ The steps taken in the test
- √ The results
- √ Graphical representations
- √ Conclusion

All documents should be on headed paper and the document should be officially signed off.

All documentation must be in English or include adequate translation.

Certification

Where certificates are provided, all tests must be carried out by an organisation that is accredited by a national accreditation body recognised via the European Cooperation for Accreditation (preferred) or the International Accreditation Forum.

All documentation must be in English or include adequate translation.

Scientific Equivalence

Some Triple E criteria conditions allow for scientifically equivalent tests and/or standards to be used. In the event that a product has not been designed, manufactured or tested to the specific standard named, then documentation relating to an equivalent internationally recognised standard may be used (where the phrase 'Or scientific equivalent' is included in the Triple E condition or help documentation). In such applications, the onus will be on the product submitter to demonstrate satisfactory equivalence of the standards. However, submissions which reference such supporting documentation may take longer to process, and if the product provider does not provide satisfactory evidence of equivalence, then the product will not be considered eligible for the Triple E register.

All documentation must be in English or include adequate translation.

Note: Where specific standards are cited in a condition or in the Triple E help documentation, then documentation demonstrating that the relevant products have been designed, manufactured or tested to these specific standards is preferred. Scientific equivalence is considered the exception rather than the norm.