

## NEC Display Solutions

# TCO Certified Projectors

## Maximum Quality - Minimum Environmental Impact

TCO certification of NEC projectors both affirms and incentivises our efforts to minimise environmental impact whilst at the same time deliver outstanding performance and cost effectiveness. We consider the TCO commitment to genuine independent analysis and their image size and technical aspects comparisons as perfect standards against which our projectors can be measured.



### TCO Certification Explained

#### Projectors Certified for Outstanding Image Quality

Increasingly projectors are used in education, business meetings, public gatherings and home cinema settings.

When buying a projector, you want to make sure it meets your performance needs. But product choice can be overwhelming. TCO Certified offers an easy way to choose a projector that offers high performance, sharp image, energy efficiency – all in an eco-friendly design.

In order to get the best possible image quality from a projector there are many product performance features that need to work well together.

The TCO Certified label is the easy way to choose a projector that produces the optimal image for your usage setting. When a projector manufacturer applies for TCO Certified, several projector characteristics are evaluated and the product is stringently tested for image performance up to a certain maximum projected size, the TCO Image Size. TCO Certified projectors are tested for both office and home cinema settings (Office/Video).

All you need to know when choosing a projector with the best image quality for your needs is:

- The size of the image area to be projected
- Whether the projector has been TCO Certified to manage at least this image size.

TCO Certified is the only independent label that offers buyers an easy way to select projectors based on projected image size.

#### Designed for the Environment

Building on the long history of the TCO certification environmental requirements for IT products, projectors carrying the TCO Certified label feature low energy consumption and minimal levels of environmentally hazardous substances.

The certification also includes an eco mode requirement so the projector can be set to lower luminance, reducing noise, energy consumption and increasing the life of the lamp. In addition, all manufacturers applying for TCO Certified must demonstrate a commitment to social responsibility in their corporate activities.

#### All Product Models Independently Tested

Trust and quality assurance are key elements of the TCO Certified program. Our label is among the few assurances for buyers that every product model is tested by an independent, accredited test laboratory. Purchasers and users look to the TCO certification program as a credible tool when specifying products to meet environmental and performance needs.

### TCO Certification Summary

#### How TCO Work

In developing the requirements for TCO Certified, TCO Development, the company behind TCO Certified, works with multiple stakeholders,

including international specialist committees, user groups, industry networks and independent experts to ensure worldwide applicability for TCO Certified. Requirements are updated in line with the development and roll-out of new technologies, so TCO Certified is always current.

Since 1992, the TCO certification has had a considerable impact on the development of IT products with increasingly improving image quality, lowering of electrical and electromagnetic fields, reduced energy consumption and minimal use of environmentally hazardous substances.

This ongoing process helps drive development towards ICT products that are increasingly designed to combine high performance with low environmental impact.

TCO Certified is available for displays, computers, notebooks, headsets and projectors. TCO Development is headquartered in Stockholm, Sweden with regional presence in Central Europe, North America and Asia.

### About TCO Development

TCO Development's mission is to make it easy to choose IT products that are designed for the benefit of both the user and the environment.

## NEC TCO Certified Projectors: M311W, M323W, UM301X, UM301W

## TCO Criteria Examples

Environmental Features	Usability Features
Throughout the Product's Lifecycle	
<b>Production</b>	<b>The TCO Image Size Rating</b>
Environmental management system Brand owner demonstrates Corporate social responsibility Limits on hazardous materials - for restrictions on heavy metals and flame retardants Packaging designed for recycling	Ensuring optimal image performance to match projected image size Easy to choose a projector which suits existing screens or rooms
<b>Usage</b>	<b>Calibrated Colour Temperature</b>
Energy consumption – Current Energy Star compliant Product Lifetime – warranty and availability of spare parts	The correct colour temperature provides true-to-life colours
<b>End of life</b>	<b>Large Colour Range</b>
Designed for recycling, take-back options	Accurate reproduction of a large number of colours
	<b>Even Colours</b>
	No patches of abnormal coloration on the image
	<b>Even Luminance</b>
	No patches of abnormal luminance on the image
	<b>High Contrast And Black Levels</b>
	Crucial for showing wide variety of detail in the image and dynamics in dark scenes
	<b>Low Noise Levels</b>
	Low noise relative to image size
	<b>Video and Data Inputs</b>
	Crucial for showing wide variety of detail in the image and dynamics in dark scenes
	<b>Low Electrical and Electromagnetic Fields</b>
	Users are exposed to low electrical and electromagnetic fields