



Recognition Criteria Computer Monitors

Scope

Included products: Computer Monitors, as defined below, are eligible for ENERGY STAR® Most Efficient recognition in 2023.

Computer Monitor: An electronic display intended for one person to view in a desk-based environment.

Excluded products: Signage Displays as defined by the ENERGY STAR Version 8.0 specification are not eligible for ENERGY STAR Most Efficient recognition in 2023.

Recognition Criteria

1) Product must be ENERGY STAR certified consistent with applicable ENERGY STAR Partner Commitments and the requirements set forth in the ENERGY STAR Program Requirements Product Specification for Displays currently in effect. Product performance must be certified by a certification body recognized by the U.S. Environmental Protection Agency (EPA).

2) Additional requirement:

Total Energy Consumption (E_{TEC}) in kilowatt-hours per year shall be calculated as follows:

$$E_{TEC} = 8.76 \times (0.35 \times P_{ON} + 0.65 \times P_{SLEEP})$$

Where:

P_{ON} = measured On Mode power in watts; P_{SLEEP} = measured Sleep Mode power in Watts;

Total Energy Consumption (E_{TEC}) shall be less than or equal to Maximum allowable Total Energy Consumption in kilowatt-hours per year calculated as follows:

$$E_{TEC_{MAX}} = (1.9 + (0.12 \times A) + [3.1 \times (r + C)]) \times eff_{AC_DC}$$

Where:

$$eff_{AC_DC} = \begin{cases} 1.00 & \text{for AC-powered monitors} \\ 0.85 & \text{for DC-powered monitors} \end{cases}$$

A = viewable screen area in square inches;

r = Total Native Resolution in megapixels; and

$$0 \quad \text{if } A < 180 \text{ in}^2$$

$$C = -0.2 \quad \text{if } 180 \text{ in}^2 \leq A < 220 \text{ in}^2$$

$$-1.0 \quad \text{if } A \geq 220 \text{ in}^2$$

Recognition Period

The U.S. Environmental Protection Agency will add qualifying models to the ENERGY STAR Most Efficient 2023 product list for Computer Monitors from January 1, 2023, through December 31, 2023. The ENERGY STAR Most Efficient 2023 designation may be used in association with models recognized during this period for as long as the model remains on the market.