

White Paper

Energy Consumption

CELSIUS W5012



*covers all brand names followed by suffixes

White paper Energy Consumption March 2023

In order to strengthen the leadership in implementing European environmental protection regulations, Fujitsu provides all important energy information on its products. The energy efficiency test reports required by Commission Regulation (EU) No 617/2013 are publicly available. These reports have to be done with maximum configurations which are not used by the majority of customers. To give more practical and usable values, Fujitsu provides additional information on power consumption for standard configurations based on ENERGY STAR® 8 calculation for dedicated products (e.g. ESPRIMO, CELSIUS). In case of products with less configuration options (e.g. LIFEBOOK, FUTRO) the power consumption of the system is part of the Eco declaration and based on maximum configuration.

A. Web addresses for additional information on Energy, Environment and End-of-life treatment

Fujitsu supports important information for energy, environment and End-of-life treatments on the basis of European directives and beyond. Listed below are web addresses pertaining to this topic:

Energy reports [Home - Certificate Portal \(fujitsu.com\)](https://www.fujitsu.com/home/certificate-portal)
 Environment [Global Product Sustainability : Fujitsu Global](https://www.fujitsu.com/global-product-sustainability)
 End-of-life treatment [Recycling Program : Fujitsu EMEA](https://www.fujitsu.com/recycling-program)

B. Power Consumption and Typical Energy Consumption (ETEC)

Conventional mode			
Typical Configuration	SSD 256GB M.2, 1x8GB, GFX T400, Windows® 11™, Slim ODD	SSD 512GB M.2, 1x16GB, GFX T1000, Windows® 11™, Slim ODD	SSD 512GB M.2, 1x 16GB, GFX A2000, Windows® 11™, Slim ODD
Related processor	Intel® Core™ i7-12700	Intel® Core™ i7-12900	Intel® Core™ i7-12900
Related power supply	80Plus PLATINUM 300W	80Plus PLATINUM 300W	80Plus PLATINUM 680W
Power consumption note	same values for ESTAR base unit	same values for ESTAR base unit	same values for ESTAR base unit
Power consumption: Maximum (S0*, running appl., CD in use) 1) in W	51,03	98,59	102,08
Power consumption: short Idle (Pshort idle) (S0, running OS, Idle-mode) in W	18,31	20,87	21,1
Power consumption: long Idle (Plong idle) (S0, running OS, Idle-mode) in W	7,22	6,89	7,3
Power consumption: Standby (Psleep) (ACPI status S3*, sleep, energy saving mode, WOL enabled) in W	1,04	1,1	1,29
Power consumption: Minimum (Poff) (ACPI status S5, soft off, wake up power button) 2) in W	0,22	0,22	0,46
Typical Energy Consumption (ETEC) ENERGY STAR® based, Conventional mode, 3) in kWh/year	58,83	65,51	67,54
Heat dissipation, conventional mode WOL enabled (1 W = 3,4121 BTU/h) in kBTU/year	200,7	223,5	230,4
Heat dissipation, conventional mode WOL enabled, (1 W = 3,6 kJ/h) in MJ/year	211,8	235,8	243,1

1) The Maximum Mode is measured according to SYSTEST 32 of Fujitsu for PCs. This value gives you an indication of maximum power consumption possible and is for information only, not to be used in any ETEC calculation.

2) Shipment conditions ex-factory

3) Formula used for ETEC calculation, Desktop (DT), All in One (AIO) and Notebook (NB)

ETEC = 8760/1000 x (Poff x Toff + Psleep x Tsleep + Plong idle x Tlong idle + Pshort idle x Tshort idle)

Mode weighting	Conventional DT, AIO	Conventional NB	Thin Client
T off	15%	25%	45%
T sleep	45%	45%	5%
T long idle	10%	5%	15%
T short idle	30%	25%	35%

Contact

Fujitsu Technology Solutions GmbH

Mail: ccd.info@fujitsu.com

Extranet: [Client Computing Devices](#)

Internet: [Client Computing Devices : Fujitsu Global](#)

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