



Annex B2 - Product environmental attributes Computers and computer monitors

The declaration may be published only when all rows and/or fields marked with * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P15.

Brand *	HP	Logo
Company name *	HP	
Contact information *	HP Sustainability and Compliance Center	(///)
e-mail address	sustainability@hp.com	
Internet site *	http://www.hp.com/hpinfo/globalcitizenship/environment/	
Additional information		

	The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.				
Type of product *	Thin Client				
Commercial name *	HP Elite t660 Thin Client				
Model number *	T660				
Issue date *	16/12/2024				
Intended market *	☐ Global ☐ Europe ☐ Asia, Pacific & Japan ☐ Americas ☐ Other				
Additional information					

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

About Annex B2

Annex B2 reflects Product environmental attributes relevant for Computers and Computer Monitors. The following items from the ECMA-370 Main body are not shown in the template:

P4.1 – P4.3 Consumable materials

P9.1 TEC and Print speed

P10.2 - P10.3 Chemical emissions from printing products

P11.1 - P11.3 Consumable materials for printing products

Model number *	T660	Logo	1
Issue date *	16/12/2024		

Product 6	environmental attributes - Legal requirements R	Requirement met		
Item		Yes	No n.a	١.
P1	Hazardous substances and preparations			
P1.1*	Products do comply with current European RoHS Directive. (See legal reference and NOTE B1)	\boxtimes		
P1.2*	Products do not contain Asbestos (see legal reference).	\boxtimes		
	Comment: Legal reference has no maximum concentration value.			
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),	\boxtimes		
	hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum			
	concentration values.			
P1.4*	Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated	\boxtimes		
	terphenyl (PCT) in preparations (see legal reference).			
P1.5*	Products do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the	\boxtimes		
	chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).			
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 $\mu g/cm^2/week$	\boxtimes		
	(see legal reference).			
P1.7*	Comment: Max limit in legal reference when tested according to EN1811:2011-5. REACH Article 33 information about substances in articles is available at (add URL or mail contact):			_
F 1.7	REACH Article 33 Declarations (hp.com)	\boxtimes		l .
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, the battery/accumulator is labeled with the disposal			
1 2.1	symbol. Information on proper disposal is provided in user manual. (See legal reference)		шш	
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal	\boxtimes		
	reference)			
P2.3*	Batteries and accumulators are readily removable. (See legal reference)			
P2.4*	Documentation includes the number of cycles the (secondary) battery can withstand. (See legal reference)	\boxtimes		
P2.5*	When internal batteries of a notebook computer cannot be "accessed and replaced by a nonprofessional	\boxtimes		
D 0	user", the related text is present and legible on the external packaging (see legal reference)			
P3	Conformity verification & Eco design (ErP)			
P3.1*	The product is CE-marked to show conformance with applicable legal requirements (see legal reference). The Declaration of Conformity can be requested at (add link or e-mail address):			l i
	http://www8.hp.com/uk/en/certifications/technical/regulations-certificates.html Sustainability@hp.com			
P3.2*	The product complies with the applicable Eco design requirements for energy-related products,	\boxtimes		
1 0.2	(see legal reference).		шш	
	Required information is; Silven in item P15 or added to this document,	\boxtimes		
	available at (add URL):			
P5	Product packaging Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0,01% lead, mercury, cadmium and	\boxtimes		
	hexavalent chromium by weight of these together.			
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s)			
P5.3*	used (see legal reference). The product packaging material is free from ozone depleting substances as specified in the Montreal	\square		_
1.0.0	Protocol (see legal reference).		шШ	
	Comment: Legal reference has no maximum concentration values.			
P6	Treatment information			
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).	\boxtimes		Ī
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NOTE B1 Restriction applies to the homogeneous material, unless other specified and expressed in weight %. Stating "Yes" means that the product is compliant with the mandatory requirements.

Model number *	T660	Logo	(5)
Issue date *	16/12/2024		

Product	environmental attributes - Market requirements (See General NOTE GN below)			4
1.	- Environmental conscious design	Require		
Item P7	*=mandatory to fill in. Additional information regarding each item may be found under P14. Design	Yes	No	n.a.
P/	Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable	\square		
P7.2*	Plastic materials in covers/housing have no surface coating.			$\overline{\Box}$
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.		Ħ	$\overline{\boxtimes}$
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.			
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.			
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).			
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	\boxtimes		
P7.8*	Upgrading can be done using commonly available tools	\boxtimes		
P7.9	Spare parts are available after end of production for: 5 years			
P7.10	Service is available after end of production for: 5 years			
	Material and substance requirements			
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum):			
P7.12	Material type: steel Material type: aluminium Material type: rubber/	GLASS		
	Insulation materials of external electrical cables are PVC free.			<u> </u>
P7.13	Insulation materials of internal electrical cables are PVC free.		Щ.	<u> </u>
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1% weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and			
	polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts			
	containing more than 25% post-consumer recycled content.			
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g are low	\boxtimes		
	halogen as defined in IEC 61249-2-21. (See ⁵ NOTE B2)			
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:			\boxtimes
	Marking:			
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components):			
	TBBPA (additive), TBBPA (reactive) (See NOTE B3), Other; chemical name: , CAS #:			
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g			
	according ISO 1043-4: FR(40)	\boxtimes		
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in]
	concentrations above 0,1%: 1. Chemical name: , CAS #: (See NOTE B4)			
	2. Chemical name: , CAS #: (See NOTE B4)			
	3. Chemical name: , CAS #: "			
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:			\bowtie
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been		$\overline{}$	
	assigned the following Risk phrases; and Hazard statements:			
	The source(s) for these classifications is/are found at (add URL(s)):			
	http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database (See note B5)			

GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm.

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

Model number *	T660	Logo	1
Issue date *	16/12/2024		

Product 6	Product environmental attributes - Market requirements (continued)					Requireme	ent met
Item			•	•		Yes No	n.a.
	Material and subs	tance requirements	(continued)				
P7.20*	Postconsumer recy	cled plastic material c	content is used in the p	oroduct (See NOTE B6):		
			s below shall be answ				
	percentage of	parts' weight > 25 g, total plastic by weight		cycled plastic material c	content (calculated as a		
		recycled material is	g.				
P7.21*	Biobased plastic ma	aterial content is used	in the product (See N	NOTE B7):			
		parts' weight > 25 g			ulated as a percentage		
		the biobased plastic r	naterial is g.				
P7.22*	Light sources are fr		less than 0,1 mg/lamp	o. num mercury content p	er lamp: mg		\boxtimes
P7.23*	If product includes a	an integral display, the	e total mercury conter	nt in the integrated disp	lay: mg		\square
P8	Batteries		-		·		
P8.1*	Battery chemical co	mposition: lithium/ca	arbon monofluoride				
P9 Energy consumption (See NOTE B8)						<u> </u>	
P9.1			s or energy consumpt	ions are reported:			
Energy mo	ode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard f modes and test metho		
charger plu	oower supply / ugged in the wall disconnected from	0.0547	0.0559	0.0843	EPS Energy Test Re	eport	
PTEC * Typical En	ergy Consumption	W	W	W	EnergyStar@ Progra Requirements for Co		
ETEC * Annual End	ergy Consumption	32.29 <i>k</i> kWh/year	32.29 kWh/year	32.29 kWh/year	EnergyStar@ Progra Requirements for Co		
External Po	ower Supply Efficiend	cy Level (Internationa	l Efficiency Marking P	rotocol) *:	EnergyStar@ Progra Requirements for Co		
Display res	solution * : me	egapixels			EnergyStar@ Progra Requirements for Co		
Default tim	e to enter energy sav	ve mode: minu	ites		EnergyStar@ Progra Requirements for Co	am omputer	
P9.2*	Information about th	ne energy save function	on is provided with the	e product.			
P9.3	Energy efficiency cl	ass (monitors only):					

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

NOTE B7 The following is to be excluded from the calculation of percentage: printed circuit boards, labels, cables, connectors and electronic components and postconsumer recycled plastic

NOTE B8 A Guidance document on Energy Efficiency is available;

see http://www.ecma-international.org/publications/standards/Ecma-370.htm.

Model number *	T660	Logo	
Issue date *	16/12/2024		

Product	environmental	attributes - Market requirements (co	ntinued)		Require	mení	met
Item	on vii on increas	attributes market requirements (55	ilinidod)		Yes	No	n.a.
P10	Emissions					- 10	
1 10		n – Declared according to ISO 9296 (See NO	TF B9)				
P10.1	Mode	Mode description		er limit A-weighted sound pov	ver level,		
	Idle	* Fans on	* 2.5				\neg
	Operation	* Fans on, HDD spinning	* 2.5				
	Other mode						
	Measured accor	rding to: SO 7779 ECMA-74 Other (only if not covere	d by ECMA-74)				
	Electromagnet	ic emissions					
P10.4	Computer displa program(s):	ay meets the requirement for low frequency e	electromagnetic fields	of the following voluntary			
P12		r computing products					
P12.1*		ets the ergonomic requirements of ISO 9241				<u>Ц</u>	
P12.2*		out device meets the requirements of ISO 99	95 and ISO 9241-410).			\boxtimes
P13		documentation					
P13.1*	Product packagi	ing material type(s): PAPER/Corrugated ing material type(s): PAPER/Molded Pulp ing material type(s): PAPER/Paperboard	weight (kg): 0.561 weight (kg): 0.103 weight (kg): 0.008				
P13.2*	Product plastic primary packaging is free from PVC.						
P13.3*		nary corrugated fiberboard packaging, specificered fiber content: 86 %	y the contained perce	entage of minimum post-			
P13.4*		or user and product documentation (tick box) Paper, Other	:				
P13.5		mplete this item if paper documentation used ct documentation on paper media is chlorine pecify:					
	Totally chlorine-	free					
	Elemental chlori	ine-free			X		
	Processed chlor	rine-free					
P14	Voluntary prog	rams					
P14.1	The product me	ets the requirements of the following volunta	ry program(s):				
	ENERGY STAR Eco-label: TCO	Criteria version: 9	Date: 16/12/2024 Date: 16/12/2024	Product category: Thin Clie	ent		
	Eco-label: <i>EPE</i>	AT Criteria version: IEEE 1680.1	Date: 16/12/2024	Product category: Thin Clie	ent		
P15		rmation (See NOTE B10)					
P9		mption of computer products; description					
All Sections		ironmental information contained in this of ternal standards referenced in the IT Eco- er					
D4	4 This was does	t done mat include DELID DDD DIDD on D	000				

NOTE B9 A Guidance document on Acoustic Noise is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm.

NOTE B10 Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

P7 Product Upgradability and Reparability

The following table is provided in accordance with IEEE 1680.1-2018⁶ criterion 4.4.2.5.

feature	Available [1]	Repairable [2]	Replaceable [3]	Upgradeable [4]
processor	Υ	Υ	N	N
main memory	Υ	Υ	Υ	N
mass storage (internal)	Υ	Υ	Υ	N
wireless networking	Υ	Υ	Υ	N
integrated graphics	Υ	Υ	N	N
discrete graphics	N	N/A	N/A	N/A
display panel	N	N/A	N/A	N/A
integrated keyboard	N	N/A	N/A	N/A
batteries	N	N/A	N/A	N/A
power supply	Y	Y	Υ	N
fan assemblies	N	N/A	N/A	N/A
speaker(s) (internal)	Υ	Υ	Υ	N
camera	N	N/A	N/A	N/A
touchpad	N	N/A	N/A	N/A
I/O connectors and external power connector	Y	Y	Y	N
readers [5]	N	N/A	N/A	N/A

Table notes:

- $\overline{[1] Y^*}$ = feature is available, but may not be included in every configuration
- [2] Product can be repaired (returned to fully functional state) if feature fails.
- [3] Feature can be replaced using only commonly available tools without soldering or de-soldering. Y^* = replacement may require replacing an assembly to which the feature is attached.
- [4] Base feature may be upgraded by replacing it with a higher performance module or by expanding capacity through use of expansion slots. NOTE: This evaluation does not
- account for situations in which the initial configuration purchased is already maximized. Contact HP Sales or an HP authorized reseller to determine the availability of upgrade parts and method to obtain them in your geography.
- [5] This feature category includes readers such as fingerprint readers, smart card readers, and other read-only devices, but excludes read/write devices.

P9 1. European Union Commission Regulation 2023/826- Energy Efficiency Information:

Mode / Condition	Power Consumption in Watts at 230 VAC Input Voltage	Default Time to Mode / Condit (if applicable)
Off Mode (if applicable)	0.25	Not Applicable
Standby Mode (if applicable)	Not Applicable	Not Applicable
Network Standby / Sleep / Long Idle Mode if all wired network ports are connected and all wireless network ports are activated (if applicable)	N/A	N/A
Network Standby / Sleep / Long Idle Mode (if applicable)	N/A	N/A
Technical characteristics of the external	Input Voltage and Frequency: 230 V AC 50 H.	Z
power supply to be used with that equipment. (Equipment that needs an external power	Output Current: (A) 3.3	
supply, but it is placed on the market without one) (if applicable)	Output Voltage: (V) 19.5	
one, (ii applicable)	Output Power: (W) 65	

2. European Union Commission Regulation 2023/826- Wireless Network Instructions:

Where applicable, activate and deactivate a wireless network using the instructions provided in the product user guide or the operating system. Information is also available at www.hp.com/support.

P10	Sound Pressur	Sound Pressure Level			
	Noise emission	Noise emission – Declared according to ISO 9296 (See NOTE B9)			
P10.1	Mode	Mode description	Statistical upper limit A-weighted sound pressure level, $L_{\rm pA,m}$ (dB)		

6 IEEE Standard for Environmental and Social Responsibility Assessment of Computers and Displays

Idle	* Fans on	* 14.3	
Operation	* Fans on, HDD spinning	* 14.3	
Other mode			
Measured according to: ☐ ISO 7779 ☐ ECMA-74			
Other (only if not covered by ECMA-74)			

Legal references Europe Annex B2

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive)* * Specific exemptions apply for certain products and applications.	P1.1, P3.1
Regulation (EC) 1907/2006 (REACH Regulation), annex XVII	P1.2, P1.4, P1.6, P1.7
Regulation (EC) 2037/2000, 2038/2000, 2039/2000 (Marketing and use of Ozone layer depleting substances)	P1.3, P5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2006/66/EC (Battery and accumulators Directive), as amended.* * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2,3, P8.1
Directive 2014/35/EU (Low Voltage Directive)	P3.1
Directive 2014/30/EU (EMC Directive)	P3.1
Directive 2014/53/EU (RE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Commission Regulation (EC) No 278/2009 of 6 April 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for no-load condition electric power demand and average active efficiency of external power supplies	P3.1, P3.2, P9.1
COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers	P2.4, P2.5, P3.1, P3.2, P7.23, P9.1
Regulation (EC) No 1272/2008 (CLP Regulation)	P7.19
Directive 2004/12/EC (Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1
Implementing Regulation (EU) 2019/290 establishing the format for registration and reporting of producers of electrical and electronic equipment to the register.	
Commission Implementing Regulation 2017/699 establishing a common methodology for the calculation of the weight of electrical and electronic equipment (EEE) placed on the national market in each Member State and a common methodology for the calculation of the quantity of waste electrical and electronic equipment (WEEE) generated by weight in each Member State.	