


THE ECO DECLARATION



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 * e-mail address	HP Sustainability and Compliance Center 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 t655 Thin client
Model number *	T655
Issue date *	01/07/2023
Intended market *	<input checked="" type="checkbox"/> Global <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Asia, Pacific & Japan <input type="checkbox"/> Americas <input type="checkbox"/> 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 *	T655	Logo 
Issue date *	01/07/2023	

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

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 *	T655	Logo	
Issue date *	01/07/2023		


Product environmental attributes - Market requirements (See General NOTE GN below)		Requirement met		
- Environmental conscious design		Yes	No	n.a.
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.			
P7	Design			
	Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.2*	Plastic materials in covers/housing have no surface coating.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.8*	Upgrading can be done using commonly available tools	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.9	Spare parts are available after end of production for: 5 years			<input type="checkbox"/>
P7.10	Service is available after end of production for: 5 years			<input type="checkbox"/>
	Material and substance requirements			
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum): Material type: ABS Material type: Steel			
P7.12	Insulation materials of external electrical cables are PVC free.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.13	Insulation materials of internal electrical cables are PVC free.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all <input type="checkbox"/> PCBs > 25 g <input checked="" type="checkbox"/> are low halogen as defined in IEC 61249-2-21. (See ⁵ NOTE B2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking: N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.17	<u>Alt. 1:</u> Chemical specifications of flame retardants in printed circuit boards > 25 g (without components): TBBPA (additive) <input type="checkbox"/> , TBBPA (reactive) <input type="checkbox"/> (See NOTE B3), Other; chemical name: _____, CAS #: _____ <u>Alt. 2:</u> Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g according ISO 1043-4: FR(40)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.18	<u>Alt. 1:</u> 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 #: _____ " 3. Chemical name: _____, CAS #: _____ " <u>Alt. 2:</u> Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been 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)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 *	T655	Logo 
Issue date *	01/07/2023	

Product environmental attributes - Market requirements (continued)				Requirement met		
Item				Yes	No	n.a.
Material and substance requirements (continued)						
P7.20*	Postconsumer recycled plastic material content is used in the product (See NOTE B6):			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	If YES; at least one of the two alternatives below shall be answered;					
	a) Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as a percentage of total plastic by weight) is 55% .					
	or					
	b) The weight of recycled material is g.					
P7.21*	Biobased plastic material content is used in the product (See NOTE B7):			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	If YES; at least one of the two alternatives below shall be answered;					
	a) Of total plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage of total plastic by weight) is %.					
	or					
	b) The weight of the biobased plastic material is g.					
P7.22*	Light sources are free from mercury, i.e. less than 0,1 mg/lamp.			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	If mercury is used specify: Number of lamps: and maximum mercury content per lamp: mg					
P7.23*	If product includes an integral display, the total mercury content in the integrated display: mg			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P8 Batteries						
P8.1*	Battery chemical composition:					<input checked="" type="checkbox"/>
P9 Energy consumption (See NOTE B8)						
P9.1	For the product the following power levels or energy consumptions are reported:					
Energy mode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard for energy modes and test method *		<input type="checkbox"/>
EPS No-load (External power supply / charger plugged in the wall outlet but disconnected from the product.)	0.042	0.044	0.066	EPS Energy Test Report		
PTEC * Typical Energy Consumption	N/A W	N/A W	N/A W	EnergyStar® Program Requirements for Computer		<input checked="" type="checkbox"/>
ETEC * Annual Energy Consumption	28.07 kWh/year	26.03 kWh/year	27.95 kWh/year	EnergyStar® Program Requirements for Computer		<input type="checkbox"/>
External Power Supply Efficiency Level (International Efficiency Marking Protocol) * : VI				EnergyStar® Program Requirements for Computer		<input type="checkbox"/>
Display resolution * : N/A megapixels				EnergyStar® Program Requirements for Computer		<input type="checkbox"/>
Default time to enter energy save mode: minutes				EnergyStar® Program Requirements for Computer		<input type="checkbox"/>
P9.2*	Information about the energy save function is provided with the product.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P9.3	Energy efficiency class (monitors only):					<input checked="" type="checkbox"/>

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 *	T655	Logo 
Issue date *	01/07/2023	

Product environmental attributes - Market requirements (continued)			Requirement met			
Item			Yes	No	n.a.	
P10	Emissions					
	Noise emission – Declared according to ISO 9296 (See NOTE B9)					
P10.1	Mode	Mode description	Statistical upper limit A-weighted sound power level, $L_{WA,c}$ (B)			
	Idle	* Fans on	* 2.5		<input type="checkbox"/>	
	Operation	* Fan on SSD Spinning	* 2.5		<input type="checkbox"/>	
	Other mode	Active Mode	2.5			
	Measured according to: <input checked="" type="checkbox"/> ISO 7779 <input checked="" type="checkbox"/> ECMA-74 <input type="checkbox"/> Other (only if not covered by ECMA-74)					
	Electromagnetic emissions					
P10.4	Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program(s):			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P12	Ergonomics for computing products					
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P13	Packaging and documentation					
P13.1*	Product packaging material type(s): Paper/Corrugated		weight (kg): 0.561			
	Product packaging material type(s): PAPER/Molded Pulp		weight (kg): 0.103			
	Product packaging material type(s): PLASTIC/Polyethylene Low density		weight (kg): 0.006			
P13.2*	Product plastic primary packaging is free from PVC.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum post-consumer recovered fiber content: 87 %					<input checked="" type="checkbox"/>
P13.4*	Specify media for user and product documentation (tick box): Electronic <input checked="" type="checkbox"/> , Paper <input type="checkbox"/> , Other <input type="checkbox"/>					<input type="checkbox"/>
P13.5	(Please only complete this item if paper documentation used) User and product documentation on paper media is chlorine-free: If Yes, please specify: Totally chlorine-free Elemental chlorine-free Processed chlorine-free			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
				<input checked="" type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
P14	Voluntary programs					
P14.1	The product meets the requirements of the following voluntary program(s):					
	ENERGY STAR®	Criteria version: 8.0	Date: 01/07/2023	Product category: thin clients		
	Eco-label: TCO	Criteria version: 9.0	Date: 01/07/2023	Product category: thin clients		
	Eco-label: EPEAT	Criteria version: IEEE 1680.1	Date: 01/07/2023	Product category: thin clients		
P15	Additional information (See NOTE B10)					
P9	Energy consumption of computer products; description of the tested product configuration:					
All Sections	1. Product environmental information contained in this declaration is valid as of the date the declaration is published. Changes to external standards referenced in the IT Eco-Declaration may invalidate some information contained in this declaration over					
P1	1. This product does not include DEHP, BBP, DIBP, or DBP.					

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[2]	Upgradeable[3]
processor	Y	Y	N	N
main memory	Y	Y	Y	N
mass storage (internal)	Y	Y	Y	Y
wireless networking	Y	Y	Y	N
integrated graphics	Y	Y	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
battery	N	N/A	N/A	N/A
power supply	Y	Y	Y	N
fan assemblies	N	N/A	N/A	N/A
speaker(s) (internal)	Y	Y	Y	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:

[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 1275/2008- Energy Efficiency Information:

Mode / Condition	Power Consumption in Watts at 230 VAC Input Voltage	Default Time to Mode / Condition (if applicable)
Off Mode (if applicable)	0.18	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)	0.83	10min
Network Standby / Sleep / Long Idle Mode (if applicable)	0.83	10min

2. European Union Commission Regulation 1275/2008- 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 Pressure Level

Noise emission – Declared according to ISO 9296 (See NOTE ^{B9})

P10.1	Mode	Mode description	Statistical upper limit A-weighted sound pressure level, $L_{pA,m}$ (dB)
	Idle	* Fans on	* 13.7
	Operation	* Fans on, SSD spinning	* 13.7
	Other mode	Active mode	13.9

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

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) 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.	P6.1