

Product environmental attributes - THE ECO DECLARATION

The declaration may be published only when all rows and/or fields marked with an * are filled-in (n.a. for not applicable).

Additional information regarding each item may be found under P14.

Brand *	Lenovo	Logo
Company name *	Lenovo	
Contact information *	Lenovo Global Environmental Affairs Alvin L Carter 1009 Think Place Building 2 / 5F1 Morrisville, North Carolina 27560 alcarter@lenovo.com	lenovo.
Internet site *	http://www.lenovo.com/social_responsibility/us/en/environment	t.html
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 *	Personal Computer			
Commercial name *	ThinkCentre M72e Tower			
Model number *	3662			
Issue date *	2014-10-16			
Intended market *	☐ Global ☐ Europe ☐ Asia, Pacific & Japan ☐ Americas ☐ Other			
Additional information	ENERGY STAR® Qualified; EPEAT Gold Rating, GREENGUARD Certification			

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

Quality (Control	Requireme	nt met
Item		Yes	No
QC1 *	The company enforces an internal quality control scheme to ensure the correctness of this eco declaration	\boxtimes	
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality controsuch as organized by IT-Företagen (see www.itecodeclaration.org).	ol 🖂	

Model number *	ThinkCentre M72e Tower	MT: 3662		
Issue date *	2014-10-16		Logo	lenovo.

Product	Require	men	t met	
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1)			
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.			
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), 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 terphenyl (PCT) in preparations (see legal reference).	\boxtimes		
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).	\boxtimes		
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.7*	Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1)			\boxtimes
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm²/week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:1998.			
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): http://www.lenovo.com/social_responsibility/us/en/materials.html	\boxtimes		
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference)			
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	\boxtimes		
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be "easily removable". (See legal reference)			
P3	Safety, EMC connection to the telephone network and labeling			
P3.1*	The product complies with legally required safety standards as specified (see legal reference).	\square		
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).	\boxtimes		
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference).			
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	\square		
P4	Consumable materials			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).			
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			\boxtimes
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).			
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.	d 🛚		
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	\boxtimes		
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montrea Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.	ıl 🔀		

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

Model number *	ThinkCentre M72e Tower	MT: 3662		
Issue date *	2014-10-16		Logo	lenovo.

Product environmental attributes - Market requirements - Environmental conscious design Requirement met							
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.			
P6	Treatment information						
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).	\boxtimes					
P7	Design						
D7 1*	Disassembly, recycling Parts that have to be treated congretaly are easily congreble.						
P7.1*	Parts that have to be treated separately are easily separable			- -			
P7.2*	Plastic materials in covers/housing have no surface coating.	Ц					
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.						
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.		Щ				
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	\boxtimes					
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	\boxtimes					
	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:						
D7.40	Material type: ABS Material type: PC/ABS Material type: Steel	_					
P7.12	Electrical cable insulation materials of power cables are PVC free.	 		-			
P7.13	Electrical cable insulation materials of signal cables are PVC free	Ц.	$\underline{\boxtimes}$	_ <u></u>			
P7.14	All cover/housing plastic parts >25g are free from chlorine and bromine.						
P7.15	All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See		\boxtimes				
D7.40	Note B2)						
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4: Marking:			Ш			
P7.17	Alt. 1 Chamical appointment of flame retardants in printed given theory as 25% (without components):						
	Chemical specifications of flame retardants in printed circuit boards >25g (without components): TBBPA (additive) , TBBPA (reactive) , Other; chemical name: , CAS #:	Ш		Ш			
	TBBFA (additive) , TBBFA (reactive) , Other, Chemical hame. , CAS #.						
	Alt. 2						
	Chemical specifications of flame retardants in printed circuit boards (without components) >25g according	\boxtimes					
	ISO 1043-4: Brominated Epoxy Resin See P14						
P7.18	Alt. 1						
	Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:	Ш					
	Comment: No legal limits exist, this is a market requirement.						
	1. Chemical name: , CAS #:						
	2. Chemical name: , CAS #:						
	3. Chemical name: , CAS #:						
	Alt. 2 Chamical appointance of flame retardants in plactic parts > 25g according ISO 1042.4:						
	Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:	\boxtimes					
P7.19	Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45,		Ħ	Ħ			
	R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)						
P7.20	Of total plastic parts' weight >25g, recycled material content is 43.15%.						
P7.21	Of total plastic parts' weight >25g, biobased material content is 0%.						
P7.22	Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg			\boxtimes			
P8	If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg Batteries mg						
P8.1*	Battery chemical composition:						
P8.2	Batteries meet the requirements of the following voluntary program/s:						
1	= ==== programmon			ν V			

Note B2: IEC61249-2--21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

Model number *	ThinkCentre M72e Tower	MT: 3662	3662	
Issue date *	2014-10-16		Logo	lenovo.

Product environmental attributes - Market requirements (continued) Requirement met						
Item				Yes No	n.a.	
9.1 Energy consumption 9.1 For the product the f		lo or operations	numptions are re	ported: Con P14		
	Power level at		-			
Energy mode *	100 V AC	Power level at 115 V AC	230 V AC	Reference / Standard for energy modes and test method *		
Category D		_				
Idle State - WOL Enabled	33.28 W	33.62 W	33.34 W	Use for Energy Star V5 registration (P _{idle})		
Sleep (S3) - WOL Enabled	1.52 W	1.54 W	1.82 W	Use for Energy Star V5 registration (P _{sleep})		
Off (S5) - WOL Enabled	0.65 W	<i>0.63</i> W	<i>0.90</i> W	Use for Energy Star V5 registration (Poff)		
Peak (On-max)	<i>90.33</i> W	<i>89.99</i> W	<i>91.25</i> W	Full load		
Category C						
Idle State - WOL Enabled	33.28 W	33.62 W	33.34 W	Use for Energy Star V5 registration (Pidle)		
Sleep (S3) - WOL Enabled	1.52 W	1.54 W	1.82 W	Use for Energy Star V5 registration (P _{sleep})		
Off (S5) - WOL Enabled	0.65 W	0.63 W	<i>0.90</i> W	Use for Energy Star V5 registration (Poff)		
Peak (On-max)	<i>90.33</i> W	<i>89.99</i> W	<i>91.25</i> W	Full load		
Category B				1	1	
Idle State - WOL Enabled	32.30 W	32.24 W	32.00 W	Use for Energy Star V5 registration (P _{idle})		
Sleep (S3) - WOL Enabled	1.57 W	1.59 W	1.86 W	Use for Energy Star V5 registration (P _{sleep})		
Off (S5) - WOL Enabled	0.65 W	0.63 W	0.90 W	Use for Energy Star V5 registration (Poff)	\Box	
Peak (On-max)	82.94 W	82.10 W	78.24 W	Full load	\Box	
Category A						
Idle State - WOL Enabled	31.96 W	31.91 W	31.64 W	Use for Energy Star V5 registration (P _{idle})		
Sleep (S3) - WOL Enabled	1.54 W	1.56 W	1.84 W	Use for Energy Star V5 registration (P _{sleep})	盲	
Off (S5) - WOL Enabled	0.63 W	0.65 W	0.90 W	Use for Energy Star V5 registration (Poff)		
Peak (On-max)	74.31 W	73.78 W	74.01 W	Full load	Ħ	
EPS No-load	W	W	W			
(External power supply / charger plugged in the wall outlet but disconnected from the product.)						
TEC Typical Energy Consumption	kWh/week	kWh/week	kWh/week			
ETEC * Annual Energy Consumption	Cat D: 120.31; Cat C: 120.31 Cat B: 116.69; Cat A: 115.69	Cat D: 121.61 Cat C: 121.61 Cat B: 117.00 Cat A: 115.61 kWh/year	Cat D: 121.97; Cat C: 121.97; Cat B: 117.30; Cat A: 116.02	ETEC = (8760/1000) x (Poff x 0.55 + Psleep x 0.05 + Pidle x 0.4)		
	kWh/year	kvvn/year	kWh/year			
	P _{off} : Off Mode(S5)) - WOL Enabled;	P _{sleep} : Sleep Mode(S3) - WOL Enabled; P _{idle} : Idle State - WOL Enabled	1	
Display resolution* : Meg	gapixels					
Print Speed * : Ima	ges per minute					
Default time to enter energy save	e mode: 30 minutes	i			ΙĒ	
P9.2* Information about the	e energy save funct	ion is provided w	ith the product.			
P9.3* The product meets the energy requirements of the following voluntary program/s: ENERGY STAR® version: Version 5.2 Tier: Product category: A,B,C,D Others specify:						

Model nu	ımber *	Thi	nkCentre M72e Towe	r <i>MT:</i>	3662			
Issue dat	te *	2014-1	10-16		Logo	leno	VO.	
P10	Emissio	ns						
	Noise e	mission	- Declared according to ISO 9296					
P10.1	Mode		Mode description	Declared	Declared A-v			
				A-weighted sound power	sound pressure lev	el $L_{p{\sf Am}}$ (dB)		
				· ·	Operator position	Bystander pos	itions	1
				level L_{WAd} (B)	Desktop 🔀	, ,		
					or Desk side	only if product	is not	
						operator atte	nded)	<u> </u>
	Idle		* HDD:Idle	* 3.7	23			J ∐
	Operation		* HDD: Operating	* 3.9	25			Ш
	Other m							
	Measure	ed accor	ding to: 🔀 ISO7779 🔲 ECMA-74					
					th L _{pAm} measurement dista	ince m)		
P10.2			ets the acoustic noise requirements of t		program/s:			\boxtimes
Product	environr	mental	attributes - Market requirements	(continued)		Require	ment	met
Item						Yes	No	n.a.
	Chemic	al emiss	sions from printing products					
P10.3*			according to ECMA-328 (ISO/IEC 2836)	0) standard 🔲, other	specify:			\boxtimes
P10.4	Typical e	emissior	n rate (print phase) is (mg/h):					\boxtimes
		Dust			OC			
P10.5			ion requirements of the following volunt		are met for :			\boxtimes
		Dust	Ozone Styrene	Benzene	TVOC			
D40.0			c emissions		latela af the afallactic according	\		_
P10.6	program		ay meets the requirement for low frequen	ncy electromagnetic ti	ielas of the following volunt	ary	Ш	
P11			aterials for printing products					
P11.1*			heet (SDS) is available for the ink/toner	preparation, even if r	not legally required (see P4	.3).	П	X
P11.2*	Paper c	ontainin	g post-consumer recycled fibers can I	be used, provided th	at it meets the requireme	ents of	Ħ	
	EN1228	1.			<u> </u>			
P11.3*	2-sided	(duplex)	printing/copying is an integrated produc	ct function.				\boxtimes
P12			r computing products					
P12.1*			ets the ergonomic requirements of ISO 9			\boxtimes		
P12.2*	The phy	sical inp	out device meets the requirements of IS	O 9995 and ISO 9241	-410.	\boxtimes		
P13			documentation					
P13.1*			ng material type(s): Corrugated paper		2			
			ng material type(s): Fabricated PE ng material type(s): HDPE weigh	weight (kg): 0.3 ht (kg): 0.016				
P13.2*			packaging is free from PVC.	nt (kg). 0.070		\boxtimes		
P13.3*	Specify media for user and product documentation (tick box):							
			Paper , Other	201/1				ш
P13.4*	_		and product documentation, please spec	cify contained percent	tage of post-consumer recy	/cled		
	fiber: 0	%						
P14			rmation (See Note B4)					
	NOTE: S	Supplier	makes no representations, guarantees,	assurances or warra	nties whether express or in	nplied, regardir	ng the	
			ained in this document. All information pable at the time of completion, and supp					
		•	approximate and provided for information					
	informat							
P7.17			ot contain free TBBPA in printed circuit					
P9			ar Qualified Notebooks & Tablet Com					
	http://w	ww.ene	rgystar.gov/index.cfm?fuseaction=fil	ng_a_product.showl	ProductGroup&pgw_code	e=CO		

Note B4: 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.

Legal references Europe Annex B

Reference	Declaration item
2002/95/EC (ROHS Directive)	P1.1, P4.1
REACH, Annex XVII	P1.6, P1.8, P4.2
REACH, Annex XVII	P1.4
REACH, Annex XVII	P1.2
REACH, Annex XVII	P1.7
REACH, Annex XVII	P1.9
Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000	P1.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
2006/66/EC (Battery and accumulators Directive)	P2.1, P2.2, P2,3, P3.4, P8.1
2006/95/EC (Low Voltage Directive)	P3.1, 3.4
2004/108/EEC (New EMC Directive)	P3.2, 3.4
1999/5/EC (R&TTE Directive)	P3.3, 3.4
"REACH" Regulation (1907/2006), annex VII	P1.10
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P4.3
REACH article 31, annex II	P4.3
2004/12/EC (Directive on packaging and packaging waste)	P5.1
(97/129/EC) (Commission Decision on Identification System for Packaging Materials	P5.2
2037/2000/EC Regulation on Substances that Deplete the Ozone Layer	P5.3
2002/96/EC (WEEE directive)	P3.4, P6.1
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P7.19

Lenovo ErP Lot3 Information Sheet

- PC / Notebook -

As required by 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 (ErP Lot3).

Products scope of this sheet:

Desktop computer, integrated desktop computer, and notebook computer

This document is only valid in connection with the IT Eco Declaration of the specific Product.

Commercial name	ThinkCentre M72e Tower	Logo
Model Number	3662	_
Issue Date	2014-10-16	lenovo.
Additional information		

(d)	Year of manufacture:			Availible on product label		
(e)	E TEC value (kWh) and capability ac are disabled and if the system is tes display:	N/A				
(f)	E TEC value (kWh) and capability ac are enabled: Cat. A 109.00 Cat. B 108.64 Cat. C 116.25 Cat. D 117.69					
(g)	idle state power demand (Watts);	32.39				
(h)	sleep mode power demand (Watts);	1.65				
(i)	sleep mode with WOL enabled powe	1.66				
(j)	off mode power demand (Watts);	0.68				
(k)	off mode with WOL enabled power de	0.72				
(I)	Internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable): 20% 88.86% 50% 90.38% 100% 87.76%					
(m)	External power supply efficiency (if ap 10% 20% 50% or Level:	oplicable): 100% Averaç	je ;	N/A		
(0)	The minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):					
(f)	Test parameters for measurements: the electricity supply system, — infor used for electrical testing: Test voltage in V and frequency in Hz Total harmonic distortion of the electr	circuits				
	Instrument Type	Type Or *** Make and Model **				
	AC Power Source 1~28	B0VAC;1~550HZ;1000V A.	NF;EC1000S; SN:9152124			

		Digita	al Watch	Full range	CASIO; HS-70W; SN:208Q08R					
		Powe	er Meter	0~600V;0~20A	YOKOGAWA;WT210;SN:91M94456 0					
		Hygroth	ermograph	15~35℃/15~90%	testo; 608-H1,SN:1034895602					
			anemometer	0~20m/s,-20~70°C	Testo;425;SN:02591883					
			Measuring	1°;1-300cd/m²	Konica Minolta;LS-110;					
(p-1)		The measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency: 80 PLUS® Program								
(p-2)	The measurement methodology used to determine information mentioned in points (m) – external PSU efficiency:									
				N/A						
(p-3)		The measurement methodology used to determine information mentioned in points (o) – loadingcycles batteries:								
				·						
(p-4)	The measurement methodology used to determine information mentioned in maximum, idle, sleep, off mode power as defined in Point P9.1 in the Product IT Eco Declaration:									
IEC 62301										
(q)	(q) Sequence of steps for achieving a stable condition with respect to power demand::									
	Power on -> Wait 5 minutes -> Stable condition									
(r)	Description of how sleep and/or off mode was selected or programmed:									
			Ве	gin menu -> Power -> Sele	ct sleep or off mode					
(s)	Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:									
		Contro	ol Panel->Power	Options-> Change Settings	s-> Restore default settings for this plan					
(t)	The duration of idle state condition before the computer automatically reaches sleep mode, or another condition which does not exceed the applicable power demand requirements for sleep mode (in minutes): 30 minutes									
(u)	The length of time after a period of user inactivity in which the computer automatically reaches a power mode that has a lower power demand requirement than sleep mode (in minutes): 45 minutes									
(v)	The length of time before the display sleep mode is set to activate after user inactivity (in minutes): 15 minutes									
(w)	Infor	mation or	the energy-savir	g potential of power manage	ement functionality:					
				N/A						
(x)	Use	r informati	ion on how to ena	ble the power management f	unctionality:					
				Refer to User (Guide					
Additio	n Noteb	ook Batte	ery Information:							
Yes	No	n/a		computer is operated by bat	tery/ies that cannot be accessed and replaced by	a non-professional				
			The battery	[ies] in this product ca	annot be easily replaced by users then	nselves				
Additional information										