



Annex B2 - Product environmental attributes Servers/Data Storage Products

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 *	Lenovo ThinkSystem	Logo		
Company name *	Lenovo			
Contact information *	Lenovo DCG Storage Development			
e-mail address	Rick Lin			
	Lenovo Taiwan Branch			
	8F., No. 66, Sanchong Rd.,			
	Nangang Dist., Taipei City, Zipcode: 11502			
	Rlin12@lenovo.com			
Internet site *	https://www.lenovo.com/us/en/about/sustainability			
Additional information	The latest version of this document can be found at:			
	http://www.lenovo.com/ecodeclaration			

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 *	Data Storage			
Commercial name *	DE600S			
Model number *	7Y69			
Issue date *	02/28/2020			
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 nu	mber *	7Y69	Logo	Lan		
Issue date * 02/28/2020			Lend	OVC) _{tm}	
Product	environ	mental attributes - Legal requirements		Require	men	met
Item		<u> </u>		Yes	No	N/A
P1	Hazardo	ous substances and preparations				
P1.1*	Products	s do comply with current European RoHS Directive. (See legal reference and NOTE	B1)	\boxtimes		
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.				
P1.3*	hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrach ethane, methyl bromide (see legal reference). Comment: Legal reference has no mation values.				
P1.4*		s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polych vl (PCT) in preparations (see legal reference).	lorinated			
P1.5*	Products chain co	s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 cart ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).				
P1.6*	(see lega	th direct and prolonged skin contact do not release nickel in concentrations above 0 al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	,5 μg/cm²/weel	(<u> </u>		
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail ww.lenovo.com/us/en/sustainability-resources	contact):	\boxtimes		
P2	Batterie	S				
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with the Information on proper disposal is provided in user manual. (See legal reference)	he disposal			
P2.2*		s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadm	nium. (See lega	I		
P2.3*	Batteries	s and accumulators are readily removable. (See legal reference)				X
P2.4*	Docume	ntation includes the number of cycles the (secondary) battery can withstand. (See I	egal reference)			\boxtimes
P2.5*		ternal batteries of a notebook computer cannot be "accessed and replaced by a no e related text is present and legible on the external packaging (see legal reference)				
P3		nity verification & Eco design (ErP)				
P3.1*		duct is CE-marked to show conformance with applicable legal requirements (see legal requirements) delaration of Conformity can be requested at: https://www.lenovo.com/us/en/compliar				
P3.2*	•	duct complies with the Eco design requirements for energy-related products, al reference).				
	, ,	d information is; given in item P15 or added to this document,				
DE	Dro do - 4	available at: https://www.lenovo.com/us/en/compliance/e	eco-ueciaration			
P5.1*		packaging ng and packaging components do not contain more than 0,01% lead, mercur	/ cadmium an	ıd 🔀		
	hexavale	ent chromium by weight of these together.				
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature on the legal reference).	of the material(s	s) 🔀		
P5.3*	The prod (see lega	duct packaging material is free from ozone depleting substances as specified in the Nal reference).	nontreal Protoc	ol 🔀		
DC		nt: Legal reference has no maximum concentration values.				
P6	reatme	nt information				

Information for recyclers/treatment facilities is available (see legal reference).

P6.1*

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 *	7Y69	Logo	Lanova
Issue date *	02/28/2020		LEI IOVO"

Product	environmental attributes - Market requirements (See General NOTE GN below)			
		Require	ment	met
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	N/A
P7	Design, Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable			
P7.2*	Plastic materials in covers/housing have no surface coating.	\boxtimes		
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.			
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	\boxtimes		
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).			
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives			
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):			
D7.40	Material type: Metal (Steel) Material type: PC ABS Material type:			
P7.12	Insulation materials of external electrical cables are PVC free.			
P7.13	Insulation materials of internal electrical cables are PVC free.			
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		Ш	
	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 halogen		\boxtimes	
	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: 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 #:			\boxtimes
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g			
	according ISO 1043-4: Only MIDPLANE,440.7MMX81.7MM,6.38MM" includes halogen. All other PCBs	\boxtimes		
P7.18	 are halogen free. Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in 			
F1.10	concentrations above 0.1%:			
	1. Chemical name: , CAS #: (See NOTE B4)	ш	ш	
	2. Chemical name: , CAS #: "			
	3. Chemical name: , CAS #: "			
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:			
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been			\boxtimes
	assigned the following Risk phrases; and Hazard statements:			
	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)			
P7.20*	Postconsumer recycled plastic material content is used in the product (See Note B6):		\boxtimes	
	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 %.			
	or			
	b) The weight of recycled material is g.			

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.

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.

Model number *	7Y69 Logo		Lanava
Issue date *	02/28/2020		LEI IOVO.

Product environmental attributes - Market requirements (continued)	Requi	remer	nt met
Item	Yes	No	N/A

	Material and su	bstance requirements ((continued)						
P7.21*	Biobased plastic material content is used in the product (See NOTE B7):								
	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								
	•	by weight) is %.							
	or b) The weight of the biobased plastic material is g.								
P7.22*		e free from mercury, i.e. l							
F1.22	U	d specify: Number of lam	, , ,	num mercury content pe	er lamp: mg				
P7.23*		es an integral display, the							
P8	Batteries		•		·				
P8.1*	Battery chemical	composition:							
P9	Energy consum	ption (See NOTE B8)							
P9.1		he following power levels	s or energy consumpti	ons are reported:					
Energy mo		Power level at	Power level at	Power level at	Reference/Standard for energy				
		100 V AC	115 V AC	230 V AC	modes and test method *				
Peak (On-	max)	W	W	1130 W	Full load				
Categor	V								
EPS No-loa		W	W	W					
(External p	ower supply /								
	igged in the wall								
	lisconnected from								
the produc	t.)			144					
PTEC *		W	W	W					
ETEC *	ergy Consumption		14\A/b/140.0#	Is/A/le/voor					
Annual Energy Consumption		kWh/year	kWh/year	kWh/year					
		ency Level (International	Efficiency Marking Pro	otocol) * :					
Display res		negapixels	, ,	,					
	e to enter energy:	save mode: minut	es						
P9.2*		t the energy save function	on is provided with the	product.					
P9.3		class (monitors only):	'						
P10	Emissions	,							
- 10		- Declared according to	ISO 9296 (See NOTE	E B9)					
P10.1	Mode	Mode description	,	Statistical upper limi	t A-weighted sound power level, L _{WA,c} (B)				
	Idle	* 35% loading		* 7.2					
	Operation	* 80% loading		* 8.5					
	Other mode	Declared A-weighted sound	d pressure level (dB)	(operator po	sition desktop – idle)				
		L_{pAm}							
	Other mode	Declared A-weighted sound	d pressure level (dB)	(operator po	sition desktop – operating)				
		L_{pAm}							
	Measured accord	ding to: 🔀 ISO 7779 🔃	ECMA-74						
		Other	(only if not covered by	y ECMA-74)					
	Electromagneti	c emissions							
P10.4		y meets the requirement	for low frequency elec	ctromagnetic fields of th	ne following voluntary				
	program(s):								

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

NOTE B9 A Guidance document on Acoustic Noise is available;

 $see \ \underline{http://www.ecma-international.org/publications/standards/Ecma-370.htm}$

Model nu	ımber *	7Y69			Logo	Leno	VO	
Issue dat	Ssue date * 02/28/2020			Lelio	VU	тм		
Product	environn	nental attribu	tes - Market requiremen	ts (continued)		Require	ment	met
Item			•	,		Yes	No	N/A
P12		nics for compu						
P12.1*	The disp	lay meets the e	rgonomic requirements of ISC	O 9241-307 for visual	l display technologies.			\boxtimes
P12.2*	The phys	sical input devic	e meets the requirements of	ISO 9995 and ISO 92	241-410.			\boxtimes
P13		ng and docum						
P13.1*	Product Product Product Product Product	packaging mate packaging mate packaging mate packaging mate packaging mate	erial type(s): Corrugate we erial type(s): PE Film we erial type(s): Wood we erial type(s): Laminated LDP erial type(s): PP Harden Plas					
P13.2*	Product	plastic primary _ا	packaging is free from PVC.			\boxtimes		
P13.3*			rrugated fiberboard packagir er content: 35 %	ng, specify the conta	nined percentage of minim	um post-		
P13.4*		media for user a	nd product documentation (ti	ck box):				
P13.5	Ùser and		nis item if paper documentation nentation on paper media is c					
	Element	hlorine-free al chlorine-free ed chlorine-free						
P14	Volunta	ry programs						
P14.1	The prod	luct meets the r	equirements of the following	voluntary program(s)	:			
	Eco-labe	el:	Criteria version: Criteria version: Criteria version:	Date: Date: Date:	Product category: Product category: Product category:			
P15			(See NOTE B10)					
P9	NOTE: S the info supplier informa Accoun	Supplier makes rmation contain s's knowledge of tion. The inform t Representativ	of computer products; desc on o representations, guara ned in this document. All in available at the time of com mation provided here is app te for more information. fied Enterprise Servers for t	ntees, assurances of formation provided pletion, and supplie proximate and provi	or warranties whether exp by supplier in this docun er shall have no obligation ded for informational purp	nent is provided in to update such	based	d on
	https://www.energystar.gov/products/data center equipment/enterprise servers							

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.

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.	

Lenovo ErP Lot9 Information Sheet - Servers & Storage Products-

As required by COMMISSION REGULATION (EU) 2019/424 of 15 March 2019 laying down ecodesign requirements for servers and data storage products pursuant to Directive 2009/125/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No 617/2013. (ErP Lot9)

Products scope of this sheet: Servers & storage products

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

SERVERS

General information			
Commercial name (3.1 (b))	DE600S	Logo	
Contact Address (3.1 (b))			
Model Number (3.1 (c))	7Y69		Lenovo
Issue Date	02/28/2020		
Additional information			

Product e	environmental attributes (EU) 2019/424 – Annex II points 3.1 and 3.3					
1.a	Is product considered to be in scope of ErP Lot 9 in scope out of scope, product is out of scope as:					
1.b (3.1 (a))	Server type Rack Server High Performance Computing (HPC) Tower Server Multi Node Server Blade Server Data Storage product (Please go to "DATA STORAGE PRODUCTS" section)					
1.c (3.1 (d))	Year of manufacture:					
1.d (3.1 (p))	Product model part of a server product family? No Yes List of all model configurations that are represented by the model:					
1.e (3.1 (n))	Information on the secure data deletion functionality (a) instructions on how to use the functionality: (b) techniques used: (c) supported secure data deletion standard (if any): OR - Reference to other information:					
1.f (3.1 (o))	Blade servers? No Yes list of recommended combinations with compatible chassis:					
Recycling	g Data					
2.a (3.3 (a))	Indicative weight range at component level, of the following critical raw materials: (a) Cobalt in the batteries (b) Neodymium in the HDDs less than 5 g between 5 g and 25 g above 25 g (b) Neodymium in the HDDs above 25 g					
2.b (3.3 (b))	Instructions on the disassembly operations (a) the type of operation; (b) the type and number of fastening technique(s) to be unlocked; (c) the tool(s) required. 					
_	OR - Reference to other information:					
2.c	Firmware Reference to information on last available firmware:					
Additional	l information					

DATA STORAGE PRODUCTS

Commercial name (3.2 (b))	DE600S	Logo
Contact Address (3.2 (b))	Lenovo DCG Storage Development Rick Lin Lenovo Taiwan Branch 8F., No. 66, Sanchong Rd., Nangang Dist., Taipei City, Zipcode: 11502 Rlin12@lenovo.com	Lenovo
Model Number (3.2 (c))	7Y69	
Issue Date	02/28/2020	
Additional information		

Product e	environmental attributes (EU) 2019/424 – Annex II points 3.2 and 3.3		
A.1	Is the product consider to be in scope of ErP Lot 9 🔀 in scope 🗌 out of scope Product is out of scope as:		
A.2	Data Storage type		
(3.2 (a))	Large Data Storage Product Other:		
A.3 (3.2 (d))	Year of manufacture: 2018		
A.4	PSU efficiency at 10 % (if applicable), 20 %, 50 % and 100 % of rated output power		
(3.2 (e))	(expressed in % and rounded to the first decimal place): : Multi-output Single-output		
	10% 20% 91.9 50% 94.4 100% 93.4 Average		
A.5 (3.2 (f))	Power factor at 50 % of the rated load level (rounded to three decimal places) 0.990		
A.6 (3.2 (g))	Operating condition class (as defined in Table 6 or ErP lot 9)		
	Exception comments		
	This product has been tested in order to verify that it will function within the boundaries (such as temperature and humidity) of the declared operating condition class.		
A.6	Information on the secure data deletion tool(s)		
(3.2 (h))	(a) instructions on how to use the functionality:		
	Follow Secure Data Deletion README, starting from SANtricity 11.50.3R1P1 via		
	https://datacentersupport.lenovo.com/us/zc/products/storage/lenovo-storage/thinksystem- de600s/7y69/documentation		
	(b) techniques used:		
	Python script to purge all user data		
	(c) supported secure data deletion standard (if any):		
	OR - Reference to other information: Go through SecureDataDeletion README and run .py accordingly via		
	https://drive.google.com/open?id=1EZ1QLbbM4w8zeUIRwJ-J8iF-AS2VwKOt		
RECYCL	ING DATA		
B.1	Indicative weight range at component (a) Cobalt in the batteries (b) Neodymium in the HDDs		
(3.3 (a))	level, of the following critical raw materials:		
	icos trair o g		
	between 5 g and 25 g between 5 g and 25 g		
B.2	above 25 above 25 Instructions on the disassembly operations		
(3.3 (b))	(a) the type of operation; <i>Refer to the installation guide, use reverse process.</i>		
	https://datacentersupport.lenovo.com/us/zc/products/storage/lenovo-storage/thinksystem-		
	de600s/7y69/documentation		
	(b) the type and number of fastening technique(s) to be unlocked; Refer to the installation guide.		
	(c) the tool(s) required. Phillips screwdriver, Flat blade screw driver, Hex driver, Torx driver, and Allen wrenches of appropriate size		
D.O.	OR - Reference to other information:		
B.3	Firmware		
	Reference to information on last available firmware:		
	https://datacentersupport.lenovo.com/us/zc/products/storage/lenovo-storage/thinksystem-de600s/7y69/downloads/driver-list/		
	After EOL'ed, firmware would be available at:		
	https://download.lenovo.com/eol/index.html		
	The state of the s		
Additional	information		
1			