



Certificate of Authorized Reseller

Date: 10 January, 2023

To: BANCA NATIONALA A MOLDOVEI

Address: MD-2005, MOLDOVA, mun.Chisinau, mun.Chisinau, bd. Grigore Vieru, 1

Tender ID: Infrastructura pentru solutia de plati instant

16 Ianuarie 2023

Fortinet, Inc operates through a channel of independent distributors and resellers. Therefore, Fortinet hereby confirms that: IM Orange Moldova SA

Having its registered place of business at:

str. Alba Iulia 75, Chisinau, MD 2075, Moldova, Republic of;

is currently an authorized FortiPartner and is currently authorized throughout MD to sell Fortinet products as a partner with the following designations:

- Level of Engagement: Advocate
- Business Model: Integrator, MSSP

This certificate is issued as of the date shown above, and is valid for 180 days from this date.

Provided the FortiPartner identified above has purchased applicable support services from Fortinet and the applicable support services have been effectively registered and contracted with Fortinet, Fortinet agrees and undertakes that Fortinet would provide support for the applicable Fortinet products according to the terms of the support agreement, available at <https://support.fortinet.com>. Fortinet Products are shipped subject to the terms of its then-current End User License Agreement, available at <http://www.fortinet.com/doc/legal/EULA.pdf>, which sets forth Fortinet's warranty.

This certificate is subject to the FortiPartner maintaining its FortiPartner Agreement with Fortinet and to Fortinet's FortiPartner guidelines. Fortinet's partner program and its guidelines are available for review at http://www.fortinet.com/partners/partner_program/fpp.html. Notwithstanding anything to the contrary herein, authorized FortiPartners do not represent Fortinet and can not make statements that are binding on behalf of Fortinet.

Legal Form Approved
2022
Legal
Fortinet, Inc.
899 Kifer Road
Sunnyvale, California 94086
United States of America
Manufactured Confirmation 2022
duly incorporated under the laws of the State of Delaware
Fortinet, Inc. 2022
Thomas Schmidt
Vice President, Legal & Compliance, International

Manufacturer's Authorization Form

To:

Interprinderea Mixta OrangeMoldova SA
Str. Alba Iulia nr. 75,
Chişinău, Moldavia

Re: Tender from date: 1/6/2023

Dear Sirs,

This is to confirm that Hewlett Packard Enterprise B.V., Amstelveen, Meyrin Branch (herein "HPEBV") is aware of the following:

- Interprinderea Mixta OrangeMoldova SA, Str. Alba Iulia nr. 75, Chişinău, Moldavia (herein "HPE Partner") intends to submit a bid on the tender from date 1/6/2023 – "Module pentru echipamente active de retea" to National Bank of Moldova, B-dul Renaşterii nr. 7, Chişinău, Moldavia (herein the "Customer") which includes the following HPE products (herein "HPE Products"): HPE Networking and
- If the bid is awarded to the HPE Partner, the HPE Partner will subsequently negotiate and sign a contract, subject exclusively to the terms and conditions between the Customer and HPE Partner, for the supply to the Customer of an IT solution including above mentioned HPE Products.

HPEBV acknowledges that HPE Partner is, at the date of this letter, a non-exclusive HPE authorized Reseller for the sale of above mentioned HPE Products. In the framework of the above-mentioned bid and its potential subsequent contract, HPE Partner is acting in its own name and on its own behalf, and has no right, power or authority to create any obligation or duty, express or implied, on behalf of HPEBV.

HPE is only responsible for providing standard warranty on the Products as per HPE standard warranty terms and conditions applicable to Moldavia. The delivery of the HPE standard product warranty is provided by either the local HPE office in Moldavia, or a local HPE authorized support provider.

Respectfully yours,

Geneva, 11th of January 2023

Hewlett Packard Enterprise B.V.

Amstelveen, Meyrin Branch



Biljana Weber
SVP and Managing Director

Вих №0035/-1 від 13 січня 2023 року

Customer: Banca Națională a Moldovei

Contest: [ocds-b3wdp1-MD-1670506175078](#)

Procurement subject: Infrastructura pentru soluția de plăți instant

Product description: ThinkSystem SR650 V2, ThinkSystem DE4000F

Manufacturer's Authorization Form

Date: January 13, 2023

By this letter, LLC Lenovo Ukraine, which is the official representative of the computer equipment manufacturer Lenovo in Armenia, Georgia, Moldova and Ukraine, do hereby authorizes **Orange Moldova SA, Alba Iulia, 75, Chisinau, Moldova**, in so far as it relates to goods produced by our company to bid, negotiate with the subsequent contract signing in the framework of the procedure of competitive bidding. Also we confirm that the equipment offered in tender is new.

We confirm the validity of the warranty and service support of our official service network in Moldova during the warranty period for all Lenovo products, to be offered by **Orange Moldova SA, Alba Iulia, 75, Chisinau, Moldova**, within the framework of the procedure of competitive bidding.

Director

LLC Lenovo Ukraine



Taras Dzhamalov



**This certifies that
Adrian Constantin Fainis
has achieved
NSE 5 Network Security Analyst**

Date of achievement: October 8, 2021

Valid until: October 8, 2023

Certification Validation number: byZ5EMJ2PM

A handwritten signature in black ink, appearing to read "Ken Xie".

Ken Xie
CEO of Fortinet

A handwritten signature in black ink, appearing to read "Michael Xie".

Michael Xie
President and Chief Technology
Officer (CTO), Fortinet



Verify this certification's authenticity at:
https://training.fortinet.com/mod/customcert/verify_certificate.php

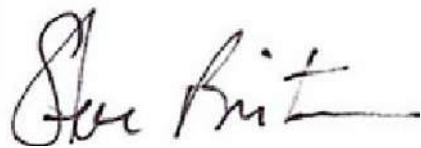
2021

Course of Achievement

Presented to Anatolie Bulgaru (I.M. ORANGE MOLDOVA S.A.)

In recognition of successfully completing the training program for Lenovo ThinkSystem storage products, which included support, troubleshooting and start-up courses

Anatolie Bulgaru (I.M. ORANGE MOLDOVA S.A.) thereof is awarded this certificate on August 02, 2021



Steve Britner

Director, Lenovo Training Solutions

The Lenovo logo is a red vertical rectangle with the word "Lenovo" in white, oriented vertically. It is positioned on the right side of the certificate.

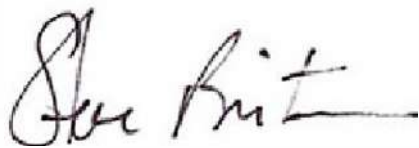
2021

Course of Achievement

Presented to Ion Cozma (I.M. ORANGE MOLDOVA S.A.)

In recognition of successfully completing the training program for Lenovo ThinkSystem storage products, which included support, troubleshooting and start-up courses

Ion Cozma (I.M. ORANGE MOLDOVA S.A.) thereof is awarded this certificate on August 02, 2021



Steve Britner

Director, Lenovo Training Solutions

The Lenovo logo is a red vertical rectangle with the word "Lenovo" in white, oriented vertically. The logo is positioned on the right side of the certificate, partially overlapping the blue geometric border.

Către: BANCA NAȚIONALĂ A MOLDOVEI
Licitație deschisă: ocds-b3wdp1-MD-1670506175078

16 ianuarie 2023

Stimată autoritate contractantă,

Prin prezenta declarație, compania Orange Moldova SA, confirmăm deservirea echipamentelor propuse la Licitație deschisă nr. ocds-b3wdp1-MD-1670506175078 din 8 decembrie 2022, achiziționarea: Infrastructura pentru soluția de plăți instant, în perioada de garanție care constituie 60 luni, ne obligăm să asigurăm:

- Posibilitatea contactării imediate a Ofertantului (Prestatorului) la linia „hot-line” disponibil 24x7, în scopul raportării unei defecțiuni sau probleme.
- În perioada de garanție, v-om asigura constatarea (diagnosticarea) unei defecțiuni în maxim 4 ore lucrătoare și remedierea defecțiunii în maxim 7 zile lucrătoare de la data reclamării acesteia de către Cumpărător (în perioada 08:00 – 18:00, zile lucrătoare).
- Constatarea și remedierea defecțiunii se va face la sediul Cumpărătorului, iar în cazul unor defecțiuni mai grave, echipamentele se vor transporta la centrul de deservire autorizat de către Producător de către Vânzător.
- La solicitarea Cumpărătorului, lucrările de remediere a defecțiunilor vor fi executate și în afara orelor de lucru, sau în zilele nelucrătoare.
- Lucrările de suport vor include următoarele:
 - diagnosticarea componentelor;
 - schimbarea (substituirea) sau repararea componentelor, instalarea, configurarea și testarea funcționării adecvate;
 - efectuarea lucrărilor de suport și upgrade a softului firmware și a celui care asigură funcționalitatea echipamentului.

Data completării 16.01.2023

Cu stimă

Anatolie BULGARU

Șef Diviziunea Suport și Elaborare Servicii IoT și ICT

Î.M. „Orange Moldova” S.A.

Acest act este semnat prin aplicarea **Semnăturii Mobile**

Verificarea semnăturii - <https://msign.gov.md/#/verify/upload>



I.M. Orange Moldova S.A.
IDNO 1003600106115
Str. Alba Iulia 75, MD-2071 Chisinau
Republica Moldova
Capital social 179499609 lei
Administrator Olga Surugiu
www.orange.md

Fluxul de lucru în perioada de exploatare operațională





I.M. Orange Moldova S.A.
IDNO 1003600106115
Str. Alba Iulia 75, MD-2071 Chisinau
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Capital social 179499609 lei
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Fluxul de lucru în perioada de exploatare operațională

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Fluxul de lucru în perioada de exploatare operațională

Despre companie

Una din activitățile de bază a companiei Orange Moldova este prestarea unei game largi de servicii în domeniul IT/ domeniul Securității Cibernetică, asistență acordată clienților pentru dezvoltarea, modernizarea și suportul infrastructurii sale IT.

Compania Orange Moldova utilizează în activitatea sa cele mai noi tehnologii în domeniile de soluții aplicative de nivelul întreprinderii, centre de date, soluții de stocare, automatizare, telecomunicații și transport de date. Experiența echipei tehnice din cadrul companiei Orange Moldova permite prestarea serviciilor de cea mai înaltă calitate și aliniată la cele mai bune practice internaționale.

Orange Moldova este partenerul celor mai renumiți Vendori – producători: Lenovo, HP, Cisco, McAfee, Microsoft, Oracle, VmWare, Huawei etc. Acest lucru se datorează inclusiv faptului că Orange Moldova nu doar implementează soluții/ bunuri pentru clienții săi dar și utilizează soluțiile și bunurile în scopul propriu, ceea ce oferă un avantaj considerabil față de alți parteneri din Republica Moldova.

Echipa tehnică și de suport include specialiști de cea mai înaltă calificare și cu experiență vastă de integrare și suport a sistemelor informatice complexe.

Echipa tehnică și de suport oferă servicii de mentenanță și suport la nivel național.

Orange Moldova este parte a Grupului Orange, unul dintre liderii mondiali în servicii de telecomunicații, cu sediul în Paris, Franța. Grupul Orange conduce un număr de aproximativ 20 000 de persoane angajate și care își desfășoară activitatea în Franța, Belgia, Marea Britanie, Elveția, Austria, Polonia, Slovacia, România, Moldova, Spania; în Africa, Orientul mijlociu și în Caraibe.

Orange este parte a grupului France Telecom, una dintre cele mai mari companii de comunicații din lume, cu peste 163 milioane de utilizatori pe cinci continente. Este inclusiv un furnizor de frunte a sistemelor informatice și a serviciilor și soluțiilor cuprinse în ele.

Fluxul de lucru în perioada de exploatare operațională

Grupul Orange prezintă rezultate record în ultima perioadă. Companie a înregistrat vânzări de 43,513 miliarde Euro.

Fluxul de lucru în perioada de exploatare operațională

Descrierea

Pentru toate echipamentele incluse în lista de echipamente deservite de centru autorizat local Lenovo pe durata garanției echipamentelor în caz și în perioada ulterioară, compania Orange Moldova va presta serviciile în conformitate cu nivele de deservire (Service Level Agreement - SLA) în descrierea serviciilor.

Punctul unic de contact

Pe durata prestării serviciilor Orange Moldova va desemna 2 (două) persoane responsabile certificate pentru controlul activităților de zi cu zi pentru îndeplinirea cererilor de suport. Acestea persoane vor acționa ca punct unic de contact în caz de escaladări.

Termenul de prestare a serviciilor

Serviciile vor fi prestate pentru toata perioada de garanție a echipamentelor.

Termenul de prestare a serviciilor poate fi prelungit ulterior la solicitarea Beneficiarului – Banca Națională a Moldovei.

Serviciile vor fi prestate pentru toata perioada contractată, dacă este indicată într-un contract de prelungire a garanției sau contract de prestare a serviciilor de mentenanță.

Nivelul de deservire (SLA)

Orange Moldova va asigura nivele de deservire în conformitate cu Descrierea Serviciilor.

Nivele de deservire solicitate pot fi clasificate pe 2 (două) nivele de descriere:

Fluxul de lucru în perioada de exploatare operațională

NIVEL	DESCRIERE
Critice – 24/7, timp de reacție 1 oră, timp de răspuns 4 ore	Sisteme care necesită o reacție rapidă în cazul unui incident, și cu demararea procedurilor de remediere imediată sau într-un timp scurt. Pentru aceste sisteme este caracteristic graficul de lucru 24 din 24 inclusiv zilele de sărbători naționale/internaționale.
Moderat Critice – 9X5, timp de reacție 1 oră, timp de răspuns 24 ore	Sisteme care necesită o reacție rapidă din partea echipei de asistență tehnică doar în timpul zilei lucrătoare, nu afectează funcționalitățile principale ale sistemului informatic, și demararea remedierii incidentului poate fi începută mai târziu.

Fluxul de lucru în perioada de exploatare operațională

Termenii și indicatorii care definesc Nivele de Deservire (SLA)

Cerere de suport este solicitarea asistenței tehnice sau raportarea unui incident prin metodele definite în metodele de comunicare definite către serviciul “hot-line”.

Timp de reacție indicatorul care definește timpul maxim de confirmare a cererii de suport. Pentru măsurarea acestui indicator se vor folosi datele din sistemul de înregistrare a cererilor de suport.

Exemplu. Incidentul a fost raportat la orele 4:00, organizația de suport confirmă recepționarea cererii de suport până la orele 5:00 prin metodele definite și în dependență de tipul incidentului începe procedura de depanare, în acest caz timpul de reacție este de o (1) oră.

Timp de răspuns este indicatorul care definește timpul minim pentru prezentarea unui scenariu de remediere a incidentului. Se va face o diferențiere între timpul de reacție din cauza că depanarea unui subsistem poate necesita prezența la sediul beneficiarului sau în centrul de date.

Exemplu. Incidentul a fost raportat la orele 4:00, timp de o (1) oră a fost confirmată recepționarea cererii de suport, specialiștii se deplasează la locul incidentului. Timpul de începere a procedurii de depanare și prezența a specialiștilor la locul incidentului este 8:00, în acest caz timpul de răspuns este 4 ore.

Fluxul de lucru în perioada de exploatare operațională

Timp de soluționare	indicatorul care definește timpul maxim de înlăturare a problemei. Exemplu. Incidentul a fost raportat în data de 1.09.2021 la orele 4:00, timp de o (1) oră a fost confirmată recepționarea cererii de suport, specialiștii se deplasează la locul incidentului. Timpul de înlăturare a problemei va fi în maxim 7 zile lucrătoare de la data reclamării acesteia.
Acoperire	este indicatorul care definește disponibilitatea specialiștilor furnizorului de servicii pentru soluționarea incidentelor. Exemplu. Specialiștii furnizorului de servicii sunt disponibili pentru recepționarea și soluționarea cererilor de suport de Luni până Vineri în timpul orelor de lucru 8:00 – 18:00, în acest caz acoperirea este Luni-Vineri 8X5. În cazul când se solicită disponibilitatea specialiștilor în regim de 24 ore pe zi, inclusiv zilele de sărbători naționale/ internaționale acoperirea este de 24X7.

Fluxul de lucru în perioada de exploatare operațională

Organizarea și asigurarea suportului

Pentru comunicarea cu furnizorul de servicii și înregistrarea cererilor de suport în contractul de deservire vor fi indicate:

- Numărul unic de telefon și fax a serviciului “hot-line”

Tel. +7 495 258 63 00

Clientul poate utiliza și Service Desk al companiei Orange Moldova:

Tel. +373 22 977 700

Fax. +373 22 977 710

- Lista de persoane responsabile pe tip de incident și telefoane de contact:

Ion Cozma

email: ion.cozma@orange.com

Tel. +37369198955

Anatolie Bulgaru

Email: anatolie.bulgaru@orange.com

Tel. +37369198955

Anton Kottsov

email: akottsov@lenovo.com

Tel. +7 (965) 446-81-20

Tetiana Nasadiuk

email: tnasadiuk@lenovo.com

Tel. +380504883511

Accent Electronic

email: service@accent.md

Tel. +373(22)577979

- Adresa de poștă electronică unică pentru cererile de suport și/sau interfața la sistemul automatizat de înregistrare a cererilor de suport “service desk”: hwsupport@ru.ibm.com

Fluxul de lucru în perioada de exploatare operațională

- Lista persoanelor pentru escaladare incidentelor

Ion Cozma

email: ion.cozma@orange.com

Tel. +37369198955

Anatolie Bulgaru

Email: anatolie.bulgaru@orange.com

Tel. +37369198955

Service Desk al companiei Orange Moldova:

Tel. +373 22 977 700

Fax. +373 22 977 710

- Lista de contacte pentru adresările directe la producător:

Anton Kottsov

email: akottsov@lenovo.com

Tel. +7 (965) 446-81-20

Tetiana Nasadiuk

email: tnasadiuk@lenovo.com

Tel. +380504883511

Important: Pentru a deschide cererea de suport va fi necesar următoarea informație:

- Machine Type – 4 cifre, Model – 3 simboluri și Serial Number – 7 simboluri al echipamentului
- Persoana responsabilă din partea Beneficiarului pentru asigurarea accesului fizic și logic la sistemele afectate: telefon și email
- Adresa locației echipamentului
- Descrierea problemei – simptome, caracterul problemei

Fluxul de lucru în perioada de exploatare operațională

При открытии заявок можно использовать следующие телефоны:
+7 495 258 63 00 – звонок из Москвы и других стран
8 800 200 63 00 – бесплатный звонок по России
8 800 30 426 30 – бесплатный звонок по Украине
либо отправить по электронному адресу hwsupport@ru.ibm.com

Размещение заявок на ремонт – информация на сайте
<http://www.ibm.com/ru/services/support/faq/>

Телефоны и эл.адрес и способы размещения:

1. Как можно зарегистрировать заявку в службе технической поддержки IBM?

По телефону:

+7 495 258 63 00 – звонок из Москвы и других стран;

8 800 200 63 00 – бесплатный звонок по России;

Через интернет:

Запрос на поддержку аппаратного обеспечения, электронная почта:
hwsupport@ru.ibm.com;

Для открытия заявки надо подготовить:

Для аппаратного обеспечения:

- Тип (Machine Type – 4 цифры), модель (Model – 3 символа) и серийный номер (Serial Number – 7 символов) оборудования;
- Данные контактного лица для связи по заявке (телефон, email);
- Адрес местоположения оборудования
- Описание неисправности

Тimp de reacție

Din momentul când a fost comunicată cererea de suport, Executorul va începe activitatea de depanare a cauzei incidentului nu mai mult decât peste o oră, cu excepția cazului în care Beneficiarul va fixa alt timp de intervenție.

Locul prestării serviciilor

Serviciile vor fi prestate la locul instalării echipamentelor sau la distanță. Pentru aceasta Beneficiarul va asigura accesul fizic și logic la locul instalării echipamentelor.

Fluxul de lucru în perioada de exploatare operațională

Limba de comunicare

Limba de comunicare cu serviciul “hot-line” poate fi la alegerea Beneficiarului – limba de stat, limba rusă, sau limba engleză.

Procedurile de suport

I. Înregistrarea cererilor de suport – în caz de necesitate, Beneficiarul se va adresa către serviciul “hot-line”. Serviciul “hot-line” comunică Beneficiarului un număr unic, acordat cererii de suport.

Obligator se va comunica următoarele informații:

- Descrierea problemei – simptome, caracterul problemei
- Timpul apariției problemei
- Persoana responsabilă din partea Beneficiarului pentru asigurarea accesului fizic și logic la sistemele afectate
- Persoana responsabilă din partea serviciului de suport Hardware

II. Procesul de depanare – în același timp cu înregistrarea cererii de suport Executorul va începe activitatea de determinare și înlăturare a cauzei cheie. Procesul de depanare va fi demarat nu mai târziu decât SLA-ul agreat.

Specialiștii Executorului se pot adresa Clientului pentru a concretiza informația primită, pentru a primi date suplimentare despre defecțiuni, sau pot interveni on-site.

III. Escaladare – în caz de necesitate Executorul va escalada incidentul la producător.

IV. Raport de progres – la cererea Beneficiarului Executorul se obligă să informeze Beneficiarul despre starea cereri de suport. Executorul se obligă să informeze Beneficiarul despre orice întârzieri în efectuarea procedurilor de remediere a incidentului, despre cauzele apariției acestora și măsurile întreprinse pentru a le înlătura. La fel progresul și starea incidentelor se va monitoriza prin intermediul sistemului Service Desk disponibil Beneficiarului.

Fluxul de lucru în perioada de exploatare operațională

V. Raport periodic – Dacă este indicat în contract, executorul se obligă să raporteze Beneficiarului lunar despre orice incidente înregistrate, starea lor, cauzele apariției, metodele de soluționare, la fel ca și orice altă informație creată sau obținută în rezultatul furnizării serviciilor de suport.

Descrierea serviciilor

Orange Moldova are toate competențele necesare pentru a presta următoarele servicii pe deplin și la cea mai înaltă calitate.

Acoperire și Timp de Răspuns

Nivelul de deservire pentru toate echipamentele este definit ca Moderat Critice.

Acoperire	Timp de Răspuns
Luni – Vineri, 9X5	Next Day

În cazul în care în anumite cazuri Beneficiarul va solicita ca anumite echipamente să fie deservite conform unui nivel înalt de deservire din cauza diferitor factori – importanța unui loc de muncă anumit, perioadă de timp critică etc, menționăm că în aceste cazuri echipa tehnică va ridica nivelul de deservire automat a resurselor echipelor de intervenție.

Timp de soluționare

În perioada de garanție se va asigura constatarea (diagnosticarea) unei defecțiuni în maxim 4 ore lucrătoare (în zilele de lucru, intervalul de timp 08:00 – 18:00, iar în cazul în care la necesitatea Cumpărătorului executarea lucrărilor de diagnosticare se efectuează în orele /zilele nelucrătoare, termenul de diagnosticare poate fi extins până la 5 zile lucrătoare) și înlăturarea problemei în maxim 7 zile lucrătoare de la data reclamării acesteia de către Cumpărător (în perioada 08:00 – 17:00, zile lucrătoare). Înlăturarea problemei presupune

Fluxul de lucru în perioada de exploatare operațională

repararea sau substituirea componentelor defectate, instalarea, configurarea și testarea funcționării adecvate a lor. La solicitarea Cumpărătorului, lucrările de remediere a defecțiunilor vor fi executate și în afara orelor de lucru, sau în zilele nelucrătoare. Constatarea și remedierea defecțiunii se va face la sediul Cumpărătorului de către personalul calificat din contul Vânzătorului, utilizând componentele livrate de producătorul echipamentului, iar în cazul unor defecțiuni mai grave, echipamentele se vor transporta la centrul de deservire autorizat de către Vânzător. În cazul unor defecțiuni mai grave, Bunurile se vor transporta de către Vânzător la centrul de deservire autorizat de către Producător. Toate serviciile legate de înlăturarea defecțiunilor (pieselor defecte) sau problemelor (inclusiv corespondența cu producătorul, transportarea, vămuirea pieselor de schimb și celor defectate, etc.) vor fi efectuate de către Vânzător din contul său. De asemenea, toate serviciile legate de returnarea (transportarea, împachetarea, vămuirea, etc.) echipamentelor/pieselor defectate către Producător vor fi efectuate de către Vânzător din contul Vânzătorului. Garanția include costul pieselor și al manoperei. Lucrările de suport vor include următoarele: i) diagnosticarea componentelor; ii) schimbarea sau repararea componentelor în caz de defectare; iii) efectuarea lucrărilor de suport și upgrade a softului firmware.



NSE Certification Program



This certifies that **Cozma Ion** has achieved **NSE 2 Network Security Associate**

Date of achievement: June 6, 2022

Valid until: June 6, 2024

Certification Validation number: VE2seU6ewL

Ken Xie
CEO of Fortinet



Verify this certification's authenticity at:

https://training.fortinet.com/mod/customcert/verify_certificate.php

Michael Xie
President and Chief Technology
Officer (CTO), Fortinet



NSE Certification
Program



This certifies that
Cozma Ion
has achieved
NSE 3 Network Security Associate

Date of achievement: June 11, 2022

Valid until: June 11, 2024

Certification Validation number: d3TR4dz8TT

Ken Xie
CEO of Fortinet



Verify this certification's authenticity at:

https://training.fortinet.com/mod/customcert/verify_certificate.php

Michael Xie
President and Chief Technology
Officer (CTO), Fortinet

2022

Lenovo Authorised Service Provider

Accent Electronic SA

Republic of Moldova

In recognition of your continued commitment to
excellence in delivering Lenovo Solutions



Fred Dickson
Executive Director – Services Delivery EMEA Services

2022
Authorised
Service
Provider

Lenovo



Certified

Dumitru Radu

has successfully completed the requirements
for certification and is hereby recognized as a

**Lenovo Certified Data Center
Technical Sales Professional**

A handwritten signature in black ink that reads "Wilfredo Sotolongo".

Wilfredo Sotolongo

Chief Customer Officer, Lenovo Data Center Group

Active Date: Mar-30-2018

Expire Date: Mar-15-2023

Validation Number 0S2TH4W1CMVE19KP

Validate at <https://www.certmetrics.com/lenovo/public/verification.aspx>





Andrei Lunga

has successfully completed the requirements
for certification and is hereby recognized as a

**Lenovo Certified Data Center
Technical Sales Professional**

A handwritten signature in black ink that reads "Wilfredo Sotolongo".

Wilfredo Sotolongo

Chief Customer Officer, Lenovo Data Center Group

Active Date: Feb-21-2022

Expire Date: Feb-21-2024

Validation Number 9XNJB2T22NV4QN51

Validate at <https://www.certmetrics.com/lenovo/public/verification.aspx>



THE ECO DECLARATION



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	Logo 
Company name *	Lenovo	
Contact information * e-mail address	Lenovo Global Environmental Affairs Alvin L Carter alcarter@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 *	SERVER
Commercial name *	Lenovo ThinkSystem SR650 V2
Model number *	7Z72, 7Z73, 7D15, 7D3Z
Issue date *	2021-05-10
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 *	7Z72, 7Z73, 7D15, 7D3Z	Logo			
Issue date *	2021-05-10				

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)	☒	☐	
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), hydrochlorofluorocarbons (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).	☒	☐	
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).	☒	☐	
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.	☒	☐	☐
P1.7*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): https://www.lenovo.com/us/en/sustainability-resources	☒	☐	☐
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)	☒	☐	☐
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal 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)	☐	☐	☒
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)	☐	☐	☒
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: https://www.lenovo.com/us/en/compliance/eu-doc#servers	☒	☐	☐
P3.2*	The product complies with the Eco design requirements for energy-related products, (see legal reference). Required information is; ☐ given in item P15 or added to this document, ☒ available at: https://www.lenovo.com/us/en/compliance/eu-doc#servers	☒	☐	☐
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.	☒	☐	
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s) used (see legal reference).	☒	☐	☐
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.	☒	☐	☐
P6	Treatment information			
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).	☒	☐	☐

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 *	7Z72, 7Z73, 7D15, 7D3Z	Logo			
Issue date *	2021-05-10				

Product environmental attributes - Market requirements (See General NOTE GN below)							
- Environmental conscious design					Requirement 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.				☒	☐	☐
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.				☒	☐	☐
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				☒	☐	☐
P7.8*	Upgrading can be done using commonly available tools				☒	☐	☐
P7.9	Spare parts are available after end of production for: years						☐
P7.10	Service is available after end of production for: years						☐
Material and substance requirements							
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum): Material type: <u>Metal</u> Material type: <u>Plastic</u> 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 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 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	<u>Alt. 1:</u> Chemical specifications of flame retardants in printed circuit boards > 25 g (without components): TBBPA (additive) ☐ , TBBPA (reactive) ☐ (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:				☐	☐	☐
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:				☐	☐	☐
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)): , (See note B5)				☐	☐	☐
P7.20*	Postconsumer recycled plastic material content is used in the product (See Note B6): 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 *	7Z72, 7Z73, 7D15, 7D3Z			Logo	
Issue date *	2021-05-10				

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

Material and substance 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 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.				☒	☐	☐
	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				☐	☐	☒
P8 Batteries							
P8.1*	Battery chemical composition: <i>Lithium Manganese Dioxide</i>						☐
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 *	☒		
<i>Peak (On-max)</i>	W	W	W	<i>Full load</i>			
Category ---							
EPS No-load (External power supply / charger plugged in the wall outlet but disconnected from the product.)	W	W	W				
PTEC * Typical Energy Consumption	W	W	W				☒
ETEC * Annual Energy Consumption	kWh/year	kWh/year	kWh/year				☒
External Power Supply Efficiency Level (International Efficiency Marking Protocol) * :							☒
Display resolution * : megapixels							☒
Default time to enter energy save mode: minutes							☐
P9.2*	Information about the energy save function is provided with the product.				☒	☐	☐
P9.3	Energy efficiency class (monitors only):						☒
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	* <i>Typical Configuration</i>	* 5.9				☐
	Operation	* <i>Typical Configuration (Stress CPU to 80% TDP or Stress GPU to TDP)</i>	* 6.2				☐
	Idle	* <i>GPU Rich Configuration</i>	* 7.2				
	Operation	* <i>GPU Rich Configuration (Stress CPU to 80% TDP or Stress GPU to TDP)</i>	* 8.5				
	Idle	* <i>Storage Rich Configuration</i>	* 7.5				
	Operation	* <i>Storage Rich Configuration (Stress CPU to 80% TDP or Stress GPU to TDP)</i>	* 7.6				
	Other mode	Declared A-weighted sound pressure level (dB) L_{pAm}	(operator position desktop – idle)				
	Other mode	Declared A-weighted sound pressure level (dB) L_{pAm}	(operator position desktop – operating)				
	Measured according to: ☒ ISO 7779 ☐ ECMA-74 ☐ 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):				☐	☐	☒

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

Model number *	7Z72, 7Z73, 7D15, 7D3Z	Logo	
Issue date *	2021-05-10		

Product environmental attributes - Market requirements (continued)		Requirement met		
Item		Yes	No	N/A
P12	Ergonomics for computing products			
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	☐	☐	☒
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.	☐	☐	☒
P13	Packaging and documentation			
P13.1*	Product packaging material type(s): Paper - Corrugated Double wall weight (kg): 3.227 Product packaging material type(s): Paper - Corrugated single wall weight (kg): 0.23 Product packaging material type(s): Plastic - Solid EPE (solid Expanded polyethylene) weight (kg): 1.287 Product packaging material type(s): Plastic - LDPE (low density polyethylene) weight (kg): 0.113 Product packaging material type(s): Paper - molded pulp weight (kg): 0.3			
P13.2*	Product plastic primary packaging is free from PVC.	☒	☐	☐
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum post-consumer recovered fiber content: 34 %			☐
P13.4*	Specify media for user and product documentation (tick box): ☒ Electronic, ☒ Paper, ☐ Other			☐
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	☐	☐	
P14	Voluntary programs			
P14.1	The product meets the requirements of the following voluntary program(s): Eco-label: ENERGY STAR Eco-label: Eco-label: Eco-label: Eco-label: Eco-label: Eco-label: Eco-label:			
P15	Additional information (See NOTE B10)			
P9	Energy consumption of computer products; description of the tested product configuration: NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implied, regarding the information contained in this document. All information provided by supplier in this document is provided based on supplier's knowledge available at the time of completion, and supplier shall have no obligation to update such information. The information provided here is approximate and provided for informational purposes only. See a Lenovo Account Representative for more information.			
P9	See Energy Star Qualified Enterprise Servers for the latest information: 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) 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

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

General information		
Commercial name (3.1 (b))	Lenovo ThinkSystem SR650 V2	Logo 
Contact Address (3.1 (b))	7001 Development Dr. Building 7 Morrisville, NC 27560 United States	
Model Number (3.1 (c))	7Z72, 7Z73, 7D15, 7D3Z	
Issue Date	2021-05-10	
Additional information		

Product environmental attributes (EU) 2019/424 – Annex II points 3.1 and 3.3									
1.a	Is the product consider 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: 2021								
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: https://lenovopress.com/lp1392-thinksystem-sr650-v2-server								
1.e (3.1 (n))	Information on the secure data deletion functionality (a) instructions on how to use the functionality: 2 methods are provided to use the functionality. 1) Use a command line tool to do the secure data deletion on the remote target system via boot up a customized Linux OS on it. Eg: OneCli.exe serase –bmc USERID:PASSWORD@xx.xx.xx.xx --sftp root:password@xx.xxx.xx.xx:/home –log 5 2) Use BoMC to create a full functions bootable media, start the media and choose secure erase from the text menu. (b) techniques used: OS tools under Linux -> Standard Linux Open Source tool (c) supported secure data deletion standard (if any): Secure Erase/block Erase/Crypto Erase, Sanitize OR - Reference to other information: Hddparm: https://en.wikipedia.org/wiki/Hddparm Nvme-format: https://www.mankier.com/1/nvme-format sg_sanitize: https://www.systutorials.com/docs/linux/man/8-sg_sanitize/ scrub: https://www.systutorials.com/docs/linux/man/1-scrub/ storcli: https://docs.broadcom.com/docs-and-downloads/raid-controllers/raid-controllers-common-iles/StorCLI_RefMan_revf.pdf								
1.f (3.1 (o))	Blade servers? ☒ No ☐ Yes list of recommended combinations with compatible chassis:								
Recycling Data									
2.a (3.3 (a))	Indicative weight range at component level, of the following critical raw materials: <table border="0"> <tr> <td>(a) Cobalt in the batteries</td> <td>(b) Neodymium in the HDDs</td> </tr> <tr> <td>☒ less than 5 g</td> <td>☐ less than 5 g</td> </tr> <tr> <td>☐ between 5 g and 25 g</td> <td>☐ between 5 g and 25 g</td> </tr> <tr> <td>☐ above 25 g</td> <td>☒ above 25 g</td> </tr> </table>	(a) Cobalt in the batteries	(b) Neodymium in the HDDs	☒ less than 5 g	☐ less than 5 g	☐ between 5 g and 25 g	☐ between 5 g and 25 g	☐ above 25 g	☒ above 25 g
(a) Cobalt in the batteries	(b) Neodymium in the HDDs								
☒ less than 5 g	☐ less than 5 g								
☐ between 5 g and 25 g	☐ between 5 g and 25 g								
☐ above 25 g	☒ 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: https://thinksystem.lenovofiles.com/help/topic/SR650V2/sr650v2_maintenance_manual.pdf								

2.c	Firmware Reference to information on last available firmware: https://datacentersupport.lenovo.com/us/en/products/servers/thinksystem/sr650v2/7z73/downloads/driver-list/
Additional information	

Server family specific information Family 1

Family no. / name	☒ 1 - 2 CPU populated family		
Model number(s) / Description (3.1 (c))	Standard or low-end performance configuration: Processor (Minimum result of core count * frequency in family): Intel Gold 6346 * 2, Storage: 16TB 3.5" HDD * 2, Memory: 16GB(lowest capacity in family) * 16, PSU: 500W * 2 High-end performance configuration: Processor (Maximum result of core count * frequency in family): Intel Platinum 8380 * 2, Storage: 240GB SSD * 2, Memory: 32GB * 16, PSU: 1800W * 2		
Additional information	You can refer to https://www.plugloadsolutions.com/80PlusPowerSuppliesDetail.aspx?id=49&type=1 , along with https://lenovopress.com/lp1392-thinksystem-sr650-v2-server & https://dcsc.lenovo.com/#/categories/STG%40Servers%20and%20Tower%20Servers%40ThinkSystem%20SR650%20V2		
Product environmental attributes (EU) 2019/424 – Annex II points 3.1 and 3.3			
F1.a (3.1 (e))	PSU efficiency at 10 % (if applicable), 20 %, 50 % and 100 % of rated output power (expressed in % and rounded to the first decimal place): ☐ Multi-output ☒ Single-output Standard or low-end performance configuration(s): 10% 91.66 20% 93.87 50% 95.01 100% 94.10 Average 94.32 High-end performance configuration(s): 10% 92.38 20% 94.75 50% 95.15 100% 93.27 Average 94.39		
F1.b (3.1 (f))	Power factor at 50 % of the rated load level (rounded to three decimal places)	standard or low-end performance configuration: 0.990	high-end performance configuration: 1.000
F1.c (3.1 (g))	PSU rated power output (in Watts rounded to the nearest integer) internal note: If a product model is part of a server product family, all PSUs offered in a server product family shall be reported with the information specified in (e) and (f)	standard or low-end performance configuration: 500	high-end performance configuration: 1800
F1.d (3.1 (h))	idle state power (in Watts and rounded to the first decimal place)	standard or low-end performance configuration: 181.7	high-end performance configuration: 184.1
F1.e (3.1 (i))	List of all components for additional idle power allowances		
idle power allowances adjustments during testing	CPU Performance	☐ 1 Socket (10 × PerfCPU W) ☒ 2 Socket (7 × PerfCPU W)	☐ 1 Socket ☒ 2 Socket
	Additional PSU	No #: 1	Yes #: 1
	HDD	Yes #: 2	No #: 0
	SDD	No #: 0	Yes #: 2
	Additional memory	Yes #: 252GB	Yes #: 508GB
	Additional buffered DDR channel	No #: 0	No #: 0
	Additional I/O devices	☒ none ☐ < 1 Gb/s: No Allowance ☐ = 1 Gb/s: 2,0 W/Active Port ☐ > 1 Gb/s and < 10 Gb/s: 4,0 W/Active Port ☐ ≥ 10 Gb/s and < 25Gb/s: 15,0 W/Active Port ☐ ≥ 25 Gb/s and < 50Gb/s: 20,0 W/Active Port ☐ ≥ 50 Gb/s 26,0 W/Active Port	☒ none ☐ < 1 Gb/s: No Allowance ☐ = 1 Gb/s: 2,0 W/Active Port ☐ > 1 Gb/s and < 10 Gb/s: 4,0 W/Active Port ☐ ≥ 10 Gb/s and < 25Gb/s: 15,0 W/Active Port ☐ ≥ 25 Gb/s and < 50Gb/s: 20,0 W/Active Port ☐ ≥ 50 Gb/s 26,0 W/Active Port
F1.f (3.1 (j))	maximum power (in Watts and rounded to the first decimal place)	standard or low-end performance configuration: 634.3	high-end performance configuration: 864.0
F1.g (3.1 (k))	operating condition class (as defined in Table 6 or ErP lot 9)	standard or low-end performance configuration: ☐ A1 ☒ A2 ☒ A3 ☒ A4 Exception comments Refer to the Operating environment section of https://lenovopress.com/lp1392- thinksystem-sr650-v2-server	high-end performance configuration: ☐ A1 ☒ A2 ☒ A3 ☒ A4 Exception comments Refer to the Operating environment section of https://lenovopress.com/lp1392- thinksystem-sr650-v2-server
F1.h (3.1 (l))	idle state power at the higher boundary temperature of the declared operating condition class (in Watts)	standard or low-end performance configuration: 238.3	high-end performance configuration: 237.5
F1.i (3.1 (m))	the active state efficiency and the performance in active state of the server;	standard or low-end performance configuration: 25.7	high-end performance configuration: 45.4

Server family specific information Family 2

Family no. / name	☒ 1 - 1 CPU populated family		
Model number(s) / Description (3.1 (c))	Standard or low-end performance configuration: Processor (Minimum result of core count * frequency in family): Intel Gold 6346 * 1, Storage: 16TB 3.5" HDD * 2, Memory: 16GB(lowest capacity in family) * 8, PSU: 500W * 2 High-end performance configuration: Processor (Maximum result of core count * frequency in family): Intel Platinum 8380 * 1, Storage: 240GB SSD * 2, Memory: 32GB * 8, PSU: 1800W * 2		
Additional information	You can refer to https://www.plugloadsolutions.com/80PlusPowerSuppliesDetail.aspx?id=49&type=1 , along with https://lenovopress.com/lp1392-thinksystem-sr650-v2-server & https://dcsc.lenovo.com/#/categories/STG%40Servers%40Rack%20and%20Tower%20Servers%40ThinkSystem%20SR650%20V2		
Product environmental attributes (EU) 2019/424 – Annex II points 3.1 and 3.3			
F1.a (3.1 (e))	PSU efficiency at 10 % (if applicable), 20 %, 50 % and 100 % of rated output power (expressed in % and rounded to the first decimal place): ☐ Multi-output ☒ Single-output Standard or low-end performance configuration(s): 10% 91.66 20% 93.87 50% 95.01 100% 94.10 Average 94.32 High-end performance configuration(s): 10% 92.38 20% 94.75 50% 95.15 100% 93.27 Average 94.39		
F1.b (3.1 (f))	Power factor at 50 % of the rated load level (rounded to three decimal places)	standard or low-end performance configuration: 0.990	high-end performance configuration: 1.000
F1.c (3.1 (g))	PSU rated power output (in Watts rounded to the nearest integer) internal note: If a product model is part of a server product family, all PSUs offered in a server product family shall be reported with the information specified in (e) and (f)	standard or low-end performance configuration: 500	high-end performance configuration: 1800
F1.d (3.1 (h))	idle state power (in Watts and rounded to the first decimal place)	standard or low-end performance configuration: 127.0	high-end performance configuration: 119.3
F1.e (3.1 (i))	List of all components for additional idle power allowances		
idle power allowances adjustments during testing	CPU Performance	☒ 1 Socket (10 × PerfCPU W) ☐ 2 Socket (7 × PerfCPU W)	☒ 1 Socket ☐ 2 Socket
	Additional PSU	No #: 1	Yes #: 1
	HDD	Yes #: 2	No #: 0
	SDD	No #: 0	Yes #: 2
	Additional memory	Yes #: 124GB	Yes #: 252GB
	Additional buffered DDR channel	No #: 0	No #: 0
	Additional I/O devices	☒ none ☐ < 1 Gb/s: No Allowance ☐ = 1 Gb/s: 2,0 W/Active Port ☐ > 1 Gb/s and < 10 Gb/s: 4,0 W/Active Port ☐ ≥ 10 Gb/s and < 25Gb/s: 15,0 W/Active Port ☐ ≥ 25 Gb/s and < 50Gb/s: 20,0 W/Active Port ☐ ≥ 50 Gb/s 26,0 W/Active Port	☒ none ☐ < 1 Gb/s: No Allowance ☐ = 1 Gb/s: 2,0 W/Active Port ☐ > 1 Gb/s and < 10 Gb/s: 4,0 W/Active Port ☐ ≥ 10 Gb/s and < 25Gb/s: 15,0 W/Active Port ☐ ≥ 25 Gb/s and < 50Gb/s: 20,0 W/Active Port ☐ ≥ 50 Gb/s 26,0 W/Active Port
F1.f (3.1 (j))	maximum power (in Watts and rounded to the first decimal place)	standard or low-end performance configuration: 361.4	high-end performance configuration: 468.9
F1.g (3.1 (k))	operating condition class (as defined in Table 6 or ErP lot 9)	standard or low-end performance configuration: ☐ A1 ☒ A2 ☒ A3 ☒ A4 Exception comments Refer to the Operating environment section of https://lenovopress.com/lp1392-thinksystem-sr650-v2-server	high-end performance configuration: ☐ A1 ☒ A2 ☒ A3 ☒ A4 Exception comments Refer to the Operating environment section of https://lenovopress.com/lp1392-thinksystem-sr650-v2-server
F1.h (3.1 (l))	idle state power at the higher boundary temperature of the declared operating condition class (in Watts)	standard or low-end performance configuration: 163.9	high-end performance configuration: 167.8
F1.i (3.1 (m))	the active state efficiency and the performance in active state of the server;	standard or low-end performance configuration: 25.5	high-end performance configuration: 40.9