

Fujitsu recommends Windows 11 Pro.

# Data Sheet

## Fujitsu Desktop ESPRIMO D9012

Space saving small form factor PC with high efficiency and premier manageability

The Fujitsu ESPRIMO D9012 is a high performance, secure Desktop PC with superior manageability, expandability and best-in-class connectivity. The 80Plus GOLD and 80Plus PLATINUM power supply helps to reduce environmental impact. The USB Type-C and flexible graphics options offer great connectivity. Faster operations, a smaller footprint in vertical position enhances space saving to create the perfect working desk.

Intel® chipset technology with higher memory speed

High performance ensures faster operations and lower system response time

- Superior Intel® Q670 chipset with 12th generation Intel® Core™ processor family
- Intel® vPro™ Enterprise and Intel® vPro™ Essentials technology as BTO

Ultimate expandability with easy serviceability

Easily customizable and highly expandable business Desktop PC

- 3x low profile (LP) or 1x LP/ 1x full height (riser) via BTO
- Space saving in width and depth with 8.3 liters volume
- Tool-less access to components, easy change and screw-less add on cards

Best-in-Class connectivity

Be flexible and stay productive in a hyper-connected world

- Support of new USB Type-C in front
- Flexible graphics options (VGA, DVI-D, HDMI, Type-C, DP, Intel® Thunderbolt™ 4)
- USB Type-C support of 60 W (optional to power a display)
- Legacy PS2, serial port connectors as option

High security with integrated options

Designed to protect data and hardware components against manipulation and theft

- Secure Core PC
- Cable cover in addition to existing Smartcard reader, Erasedisk software
- Integrated cabinet lock with Master key option
- Hole for pad lock and Kensington as standard for security

Low power consumption and environmental impact

Reduced environmental impact and reduced energy bills

- 80Plus GOLD and 80Plus PLATINUM power supply efficiency with monitor outlet
- Sum of post-consumer recycled content for plastic per weight is 61% (18% are from ITE derived post-consumer material and 43% are any other post-consumer material)



# Components

	ESPRIMO D9012	ESPRIMO D9012 ESTAR
<b>Processor</b>		
	Intel® vPro® Platform Logo (optional) with Intel® Core™ i5-12500, Intel® Core™ i5-12600, Intel® Core™ i7 and Intel® Core™ i9 processors *with Intel® Turbo Boost Technology 2.0 (clock speed and performance will vary depending on workload and other variables) **with Intel® Turbo Boost Max Technology 3.0 (clock speed and performance will vary depending on workload and other variables)	
<b>Operating systems</b>		
Operating system pre-installed	Windows 11 Pro. Fujitsu recommends Windows 11 Pro for business. Windows 11 Home Windows 10 Pro. Fujitsu recommends Windows 11 Pro for business.	
Operating system compatible	Certified for Red Hat® Enterprise Linux	
Operating system notes	Windows 11 requires for first device setup: - Internet connectivity - Microsoft account for Home editions or organizational account (e.g. ADD) for Pro editions After product end of life, Fujitsu continues to test and support new Windows releases for max. 5 years, depending on extension of hardware services through warranty top ups. For more details please visit our Fujitsu Service Statement under <a href="https://support.ts.fujitsu.com/IndexProdSupport.asp?lng=com&amp;OpenTab=">https://support.ts.fujitsu.com/IndexProdSupport.asp?lng=com&amp;OpenTab=</a> The use of Windows Operating System is subject to acceptance of the End User License Agreement of Microsoft as applicable under the relevant Microsoft program. Thunderbolt 4 not part of Red Hat® certification	
<b>Memory modules</b>		
	ESPRIMO D9012	ESPRIMO D9012 ESTAR
	ESPRIMO D9012	ESPRIMO D9012 ESTAR
<b>Graphics</b>		
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. SSD (Solid State Disk) SED (Self-Encrypting Drive) Durability in accordance with the manufacturer's indications on read and write cycles.	
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<b>Optical drive</b>		
	ESPRIMO D9012	ESPRIMO D9012 ESTAR
<b>LAN Notes</b>	WI-FI 6E: The device does not operate in 6GHz band in all countries, due to national regulations. see flexible interface options Bluetooth 5.2: Bluetooth® 5.2 operation requires Microsoft OS support. Until Microsoft OS support is available, Bluetooth® 5.2 will function as Bluetooth® 5.1 or lower	
	ESPRIMO D9012	ESPRIMO D9012 ESTAR
<b>Component notes</b>	The listed product components and optional functions are not available in all region/countries	The listed product components and optional functions are not available in all region/countries; Energy Star certification only with Windows operating system Base unit for TCO Certified generation 9

## Base unit

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Base unit	ESPRIMO D9012	ESPRIMO D9012 ESTAR

Mainboard		
Mainboard type	D4022	
Formfactor	proprietary	
Chipset	Intel® Q670	
Processor socket	LGA1700	
Processor quantity maximum	1	
Supported capacity RAM (max.)	128 GB	
Memory slots	4 DIMM (DDR4)	
Memory frequency	3,200 MT/s	
Memory notes	Dual channel support For dual channel performance, 2 memory modules have to be ordered. Capacity per channel has to be the same. 3200 MT/s may be clocked down to 2933/2400 MT/s depending on processor and memory configuration	
LAN	10/100/1,000 MBit/s Intel® I219LM	
Integrated WLAN	1 (optional)	
BIOS version	AMI Aptio V UEFI Specification 2.8	
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)	
Audio type	On board	
Audio codec	Realtek ALC897	
Audio features	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound	
I/O controller on board		
Serial ATA total	5	
Controller functions	Serial ATA III (6 Gbit) NCQ AHCI SATA RAID Support PCIe RAID (0, 1, 5) Support	
Interfaces		
Audio: line-in	1	1
Audio: line-out	1	1
Front audio: headset	1	1
Flexible Interface Options	One of following flexible Interface options can be added to the system HDMI™ (supports 4k@60Hz as specified in HDMI™ 2.1) DisplayPort™ 1.4a (external HDMI- and DVI adapters not supported) DVI-D VGA USB 3.2 Gen 2 (10Gbps) Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 60W. Occupies in addition PCIe x16 slot) USB 3.2 Gen 2 (10 Gbps) Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 15W) Intel® Thunderbolt™ 4 (40 Gbps, supports DisplayPort 1.4 and 15W power delivery) 2.5 Gigabit Ethernet (Intel 225LM) 2x USB 2.0 Type A Serial port (9pin, 16 byte FIFO, 16550 compatible)	One of following flexible Interface options can be added to the system HDMI™ (supports 4k@60Hz as specified in HDMI™ 2.1) DisplayPort™ 1.4a (external HDMI- and DVI adapters not supported) DVI-D VGA USB 3.2 Gen 2 (10Gbps) Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 60W. Occupies in addition PCIe x16 slot) USB 3.2 Gen 2 (10 Gbps) Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 15W) Intel® Thunderbolt™ 4 (40 Gbps, supports DisplayPort 1.4 and 15W power delivery) 2x USB 2.0 Type A Serial port (9pin, 16 byte FIFO, 16550 compatible)
USB front	2x USB 2.0 Type-A 2x USB 3.2 Gen 2 (10 Gbps) Type-A 1x USB 3.2 Gen 2x2 (20 Gbps) Type-C (supports up to 15W)	2x USB 2.0 Type-A 2x USB 3.2 Gen 2 (10 Gbps) Type-A 1x USB 3.2 Gen 2x2 (20 Gbps) Type-C (supports up to 15W)
USB rear	2x USB 2.0 Type-A 2x USB 3.2 Gen 1 (5 Gbps) Type-A 2x USB 3.2 Gen 2 (10 Gbps) Type-A see flexible interface options	2x USB 2.0 Type-A 2x USB 3.2 Gen 1 (5 Gbps) Type-A 2x USB 3.2 Gen 2 (10 Gbps) Type-A see flexible interface options
USB internal	1x USB 2.0 or 1x USB 3.2 Gen 2 (10Gbps) Type-A	1x USB 2.0 or 1x USB 3.2 Gen 2 (10Gbps) Type-A

Interfaces		
DisplayPort	2 (DisplayPort 1.4; DP++)	2 (DisplayPort 1.4; DP++)
Ethernet (RJ-45)	1	1
Interface Module notes	Anytime USB charge functionality	Anytime USB charge functionality
Kensington Lock support	1	1
Input device / components		
Input devices (optional)	Keyboard Mouse	
Drive bays		
Drive bays total	3	
2.5-inch internal bays	1	
5.25-inch external bays	1	
Drive bay notes	optional: 1x internal 3.5" bay (screwless) can be used via adapter for 1x or 2x 2.5" drives (screwless); 5.25" bay: for slim optical disc drive only;	
M.2-2280	2 x on mainboard for SSD NVMe (PCIe 4.0 x4; up to 64Gbit/s)	
Slots		
PCI-Express 3.0 x1	1 x (110 mm / 4.33 inch) Low profile	
PCI-Express 4.0 x16	1 x (210 mm / 8.27 inch) Low profile	
PCI-Express 4.0 x4 (mech. x16)	1 x (150 mm / 5.91 inch) Low profile	
Slots optional configuration	Optional slot versions: Rear wall with FH riser: 1x LP PCIe x4 = 150mm (5.9 inch), 1x FH PCIe x16 = 203mm (7,99 inch); CELSIUS Edition with special heatsink: 1x LP PCIe x4 = 150mm (5.9 inch), 1x LP PCIe x16 slot = 170 mm (6.69 inch) and 1x LP PCIe x1 = 170mm (6,69 inch)	
M.2-2230	on mainboard for WLAN module	
Graphics on board		
Graphics brand name	Intel® UHD Graphics 770, Intel® UHD Graphics 730, Intel® UHD Graphics 710	
Shared video memory	Up to half size of total system memory	
TFT resolution (VGA)	Up to 1,920 x 1,080 pixel	
TFT resolution (DVI)	Up to 1,920 x 1,200 pixel	
TFT resolution (DisplayPort)	Up to 4,096 x 2,304 pixel	
TFT resolution (HDMI)	Up to 4,096 x 2,304 pixel	
Graphics features	Support for up to four independent displays DirectX® 12.1 HDCP support OpenCL 3.0 OpenGL® 4.6 Vulkan™ For multi monitoring mode, graphics card and integrated graphics run in parallel DisplayPort interface supports Ver. 1.4 incl. Multi-Stream Digital audio formats are supported, including Dolby Digital Plus (7.1 channels) DVI-D interface supports audio output if connected to the HDMI interface of a display via suitable adapter cables (not included) see flexible interface options	
Base unit	ESPRIMO D9012	ESPRIMO D9012 ESTAR
Electrical values		
Power efficiency note	Power supply efficiency in % at 10% / 20% / 50% / 100% load 80Plus GOLD: for 230V ; 87/90/92/91 for 115V ; 86/89/91/88  80Plus PLATINUM: for 230V ; 88/92/94/93 for 115V ; 87/91/92/91	
Rated voltage range	100 V - 240 V	
Rated frequency range	50 Hz - 60 Hz	

**Electrical values**

Operating voltage range	90 V - 264 V	
Operating line frequency range	47 Hz - 63 Hz	
Max. output of single power supply	GOLD: 280W; PLATINUM: 300 W	
Power factor correction/active power	active	
Monitor outlet	Switched for PLATINUM power supply	
Base unit	ESPRIMO D9012	ESPRIMO D9012 ESTAR

**Power consumption**

Power consumption note	See white paper Energy Consumption	
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**Noise emission**

Related Processors for noise	Intel® Core™ i5-12500 processor and 8GB, ODD; Windows 11 (tower position)	
Standard noise emission	According to ISO 7779:2010, ECMA-74	
Standard noise notes / description	A-weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))	
Standard noise operation mode: CPU 50% load	Bystander; Operator position PLATINUM PSU: 3.3 B / 20 dB(A); 22 dB(A) (SSD M.2) GOLD PSU: 3.4 B / 21 dB(A); 22 dB(A) (3.5" HDD)	
Standard noise operation mode: HDD load	Bystander; Operator position PLATINUM PSU: 3.3 B / 20 dB(A); 22 dB(A) (SSD M.2) GOLD PSU: 3.7 B / 23 dB(A); 25 dB(A) (3.5" HDD)	
Standard noise operation mode: Idle mode	Bystander; Operator position PLATINUM PSU: 3.2 B / 19 dB(A); 20 dB(A) (SSD M.2) GOLD PSU: 3.5 B / 21 dB(A); 22 dB(A) (3.5" HDD)	
Standard noise operation mode: ODD load	Bystander; Operator position PLATINUM PSU: 4.5 B / 32 dB(A); 36 dB(A) (SSD M.2) GOLD PSU: 4.5 B / 31 dB(A); 35 dB(A) (3.5" HDD)	
Standard noise operation mode: Office applications 2.0	Bystander; Operator position PLATINUM PSU: 3.3 B / 19 dB(A); 21 dB(A) (SSD M.2) GOLD PSU: 3.4 B / 21 dB(A); 22 dB(A) (3.5" HDD)	

**Dimensions / Weight / Environmental**

Dimensions (W x D x H)	314 x 296 x 89 mm 12.36 x 11.65 x 3.51 inch	
Operating position	horizontal / vertical (optional, feet needed)	
Weight	Min: 5.7kg; 1x mem, 1xSDD Max: 6.0kg; power cord (0.2kg) is not part of min/max	
Weight (lbs)	approx. 17.64 lbs	
Weight notes	Actual weight may vary depending on configuration	
Operating ambient temperature	10 - 35 °C (50 - 95 °F)	
Operating relative humidity	5 - 85 % (relative humidity)	

**Compliance**

Product	ESPRIMO D9012	ESPRIMO D9012 ESTAR
Model	DTG	
Germany	GS TÜV NRTL	
Europe	CE	
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) Microsoft Secured-core PC certification (for selected configurations)	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) Microsoft Secured-core PC certification (for selected configurations) ENERGY STAR® 8.0 TCO Certified, generation 9 EPEAT® Gold (dedicated regions)
Compliance link	<a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a>	

### Additional Software

Additional software (preinstalled)	McAfee® LiveSafe™ (provides award-winning antivirus protection for your PC and much more. 30 days trial pre-installed) Microsoft Office (1 month trial for new Microsoft® Office 365 customers. Buy Microsoft Office.)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) Nero Essentials XL Microsoft® Office Professional 2021 Microsoft® Office Home and Business 2021 (Need to buy license to activate the pre-installed Microsoft Office. Purchase and activation only in the region in which it was acquired.)
Additional software (notes)	Use of accompanying and/or additional Software is subject to proactive acceptance of the respective License Agreements /EULAs/ Subscription and support terms of the Software manufacturer as applicable for the relevant Software whether preinstalled or optional. The software may only be available bundled with a software support subscription which – depending on the Software - may be subject to separate remuneration.
Base unit	ESPRIMO D9012 ESPRIMO D9012 ESTAR

### Security

Physical Security	Kensington Lock support Eye for padlock Integrated cabinet lock (optional) Cable Cover (optional; covers and secures the ports and cables on rear side)
System and BIOS Security	Embedded security (TPM 2.0) EraseDisk Credential Guard Ready and Device Guard Capable (requires 8 GB or more system RAM and SSD PCIe NVME) Modern Standby (Windows 11 only) and Legacy Standby selectable Write protect option for the Flash EPROM Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces NIST SP800-147 BIOS Protection supported NIST SP800-155 BIOS Integrity Measurement supported NIST SP800-193 Platform Firmware Resiliency supported
User Security	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional)
Security Notes	The properties of the product provide a baseline for product security and therefore end-customer IT security. However, these properties are not sufficient on their own to protect the product from all existing threats, such as intrusion attempts, data exfiltration and other forms of cyberattacks. To customize security settings, please use the configuration options as available for the respective product. During operation, the IT security of this product is within the responsibility of the respective administrator/end-user of the product. Please note, that Fujitsu as a manufacturer does not make any policy prescriptions or advocacy statements regarding IT security best practices and/or general product operation.

### Manageability

Manageability technology	Intel® vPro® Essentials (optional) Intel® vPro® Enterprise (optional) Intel AMT 16.0 (optional; depending on processor) DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) WoL (Wake on LAN)
Manageability software	DeskView Client DeskView Instant BIOS Management
DeskView components	BIOS Management incl. Security Inventory Management Driver Management Alarm Management

**Manageability**

Supported standards	DMI (Desktop Management Interface) SMBIOS (System Management BIOS) PXE (Preboot Execution Environment) WMI (Windows Management Instrumentation) WBEM (Web Based Enterprise Management) CIM (Common Information Model)
Manageability link	<a href="https://www.fujitsu.com/global/products/computing/pc/manageability/">https://www.fujitsu.com/global/products/computing/pc/manageability/</a>

**Miscellaneous**

	Keyboard on with one key (Fujitsu Keyboards KB521, KB955) Keyboard on with two keys (CTRL+CTRL; special Fujitsu USB keyboards required) Keyboard on with any key (USB) Thermal management Extended lifetime Internal dust filter (optional)
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**Packaging information**

Packaging dimension (mm)	499 x 296 x 439 mm
Packaging dimension (inch)	19.65 x 11.65 x 17.28 inch
Max. quantity / pallet	24
Material - Weight (g) Carton	1114 g
Material - Weight (lbs) Carton	2.46 lbs
Material - Weight (g) PE	263 g
Material - Weight (lbs) PE	0.58 lbs
Packaging notes	printed user documentation is bleached in chlorine free process; Bulk packaging for projects (optional)



**Warranty**

Warranty period	3 years
Warranty type	Bring-In / Onsite Service (depending on country)
Warranty Terms & Conditions	<a href="http://www.fujitsu.com/warranty">http://www.fujitsu.com/warranty</a>
Digital bug fixes	Subject to availability and following their generic release for the product, bug fixes and function-preserving patches for product-related software (firmware) can be downloaded from the technical support at: <a href="https://support.ts.fujitsu.com/">https://support.ts.fujitsu.com/</a> free of charge by entering the respective product serial number. For application software supplied together with the product, please directly refer to the support websites of the respective software manufacturer.

**Product Support - the perfect extension**

Recommended Service	9x5, Onsite Response Time: Next Business Day
Spare Parts availability	at least 5 years after shipment, for details see <a href="https://support.ts.fujitsu.com/">https://support.ts.fujitsu.com/</a>
Service Weblink	<a href="http://www.fujitsu.com/emeia/products/product-support-services/">http://www.fujitsu.com/emeia/products/product-support-services/</a>

## Recommended Accessories

Mouse M440 ECO BL Grey		Fujitsu Mouse M440 ECO BL Grey is made from 85% Plastic Consumer Recyclate (PCR) material and has a completely PVC free cable. The elegant M440 ECO BL Grey works on nearly every surface and follows all your hand movements smoothly and precisely. It features two main buttons and a scroll wheel providing comfortable computing to both right and left-handed users. Clicking noise is reduced by 90% due to silent keys.	Order Code: S26381-K450-L101
Keyboard KB521 ECO		Fujitsu's Keyboard KB521 ECO is the perfect contribution to Green IT. The keyboard is made out of 70% Post Consumer Recycling (PCR) material and comes with a PVC free USB cable. It offers first class comfort and ergonomics with smart features like 12 multi-function keys to provide you with fast access to your applications. The impressive modern design is spill resistant against small mishaps like the content of your coffee cup.	Order Code: S26381-K523-L1** (**: country specific variation)

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Keyboard KB521 ECO



Keyboard KB521 ECO is an eye-catching designer keyboard on your desk which is designed to fulfill green aspects. With the slim, ergonomic form factor and Power On key, Keyboard KB521 is the perfect partner for your sophisticated desktop PC. It is spill resistant to protect against the contents of your coffee cup, and has 12 multi-function keys to provide you the fast access to your applications.

S26381-K523-L1\*\* (\*\*: country specific variation)

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Keyboard KB521 ECO

Keyboard KB521 ECO is an eye-catching designer keyboard on your desk which is designed to fulfill green aspects. With the slim, ergonomic form factor and Power On key, Keyboard KB521 is the perfect partner for your sophisticated desktop PC. It is spill resistant to protect against the contents of your coffee cup, and has 12 multi-function keys to provide you the fast access to your applications.



# More information

## Fujitsu products, solutions & services

In addition to Fujitsu Desktop ESPRIMO D9012, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

### Computing Products

[www.fujitsu.com/global/products/computing/](http://www.fujitsu.com/global/products/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

## More information

Learn more about Fujitsu Desktop ESPRIMO D9012, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/emeia/products/computing/pc/desktops/](http://www.fujitsu.com/emeia/products/computing/pc/desktops/)

## Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.

Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT.

Please find further information at <http://www.fujitsu.com/global/about/environment>



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## Disclaimer

Please note that the data sheet reflects the technical specification with the maximum selection of components for the named system and not the detailed scope of delivery. The scope of delivery is defined by the selection of components at the time of ordering.  
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The overall product has been designed and manufactured for general office use, regular personal use and ordinary industrial use.

## Contact

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