Fujitsu recommends Windows 11 Pro.



## **Data Sheet**

# Fujitsu Desktop ESPRIMO G7012A

### A smart and ultra-compact Mini PC for advanced office needs

The Fujitsu ESPRIMO G7012A is a smart Mini PC which offers advanced Desktop PC functionality in an ultra-compact, space-saving design. Making it a perfect device for working from home or in flexible workplaces with its single cable Type-C connection. Provided with the AMD Ryzen™ PRO processors and embedded AMD Radeon™ graphics, the devices empowers impressive price/performance ratio.

A smart Mini PC with ultra-compact design Eye-catching exclusive modern design

- Low noise Mini PC thus providing ergonomic, clean and clutter-free working environment
- Offers advanced desktop PC functionality with a volume of only ~0.87 liters
- Impressive performance/volume ratio and is easy to set up in minutes

Small in size but grand in performance

High performance for best price in a small Mini PC design

- Supreme performance with AMD Ryzen<sup>™</sup> PRO processors
- $\blacksquare$  Powerful embedded AMD Radeon  $^{\!\scriptscriptstyle\mathsf{TM}}$  graphics for low power consumption
- AMD Ryzen Pro /w DASH for high-level security- and manageability demands

### Flexibility without limits

Pleasant working environment due to quiet system

- Concept with different heights allows ODD and upgrade options like power supply
- Flexibility for later device upgrades
- Various mounting options

### Ultimate usability

Perfect fit for modern offices, shared workplaces or working from home

- Integrated into Fujitsu AIO Display P2410 enables a space saving all-in-one system with flexibility for later upgrades (as shown in 2nd image)
- Can be used for horizontal or vertical operations and easy upgrade of major components
- VESA mount for attaching the PC to displays, stands or walls

### Made in Europe with best energy efficiency

Reduced environmental impact and reduced energy bills with outstanding quality and stable functions based on European production standard

- High efficient AC adapter or internal 80Plus PLATINUM power supply as option
- Sum of post-consumer recycled content for plastic per weight is up to 50% (min. 11% are from ITE derived post-consumer material and min. 35% are any other post-consumer material)

















# Components

	ESPRIMO G7012A	ESPRIMO G7012A ESTAR
Processor	AMD Ryzen™ 7 Pro 5850U (8 Cores / 16 Threads) AMD Ryzen™ 5 Pro 5650U (6 Cores / 12 Threads)	
Operating systems		
Operating system pre-installed	Windows 11 Pro. Fujitsu recommends Windows 11 Pro fo Windows 11 Home	
On a vating a systemst	Windows 10 Pro. Fujitsu recommends Windows 11 Pro fo	i business.
Operating system notes	extension of hardware services through warranty top up: For more details please visit our Fujitsu Service Statemen asp?lng=com&OpenTab=	oport new Windows releases for max. 5 years, depending on
	ESPRIMO G7012A	ESPRIMO G7012A ESTAR
Memory modules	32 GB (1 module(s) 32 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, SO DIMM 16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, SO DIMM 8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, SO DIMM 4 GB (1 module(s) 4 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, SO DIMM	
	ESPRIMO G7012A	ESPRIMO G7012A ESTAR
Graphics		
	ESPRIMO G7012A	ESPRIMO G7012A ESTAR
Mass storage 2.5 inch size	HDD SATA III, 5,400 rpm, 1000 GB, 2.5-inch HDD SATA III, 5,400 rpm, 2000 GB, 2.5-inch	
Mass Storage M.2 technology	SSD PCIe, 1024 GB M.2 NVMe module (Gen4), SED SSD PCIe, 2048 GB M.2 NVMe module (Gen4), SED SSD PCIe, 256 GB M.2 NVMe Module (Gen4), Value, SED SSD PCIe, 512 GB M.2 NVMe module (Gen4), SED SSD PCIe, 512 GB M.2 NVMe Module (Gen4), Value, SED	
Hard disk notes	One Gigabyte equals one billion bytes, when referring to SSD (Solid State Disk)	hard disk drive capacity.
	SED (Self-Encrypting Drive)  2.5-inch bay for devices with 7mm height  Durability in accordance with the manufacturer's indicati	ons on read and write cycles.
	ESPRIMO G7012A	ESPRIMO G7012A ESTAR
Optical drive	DVD Super Multi ultra slim (tray), SATA BD Triple Writer SATA ultra slim (tray), SATA	
	ESPRIMO G7012A	ESPRIMO G7012A ESTAR
LAN Notes	see flexible interface options Bluetooth 5.2: Bluetooth® 5.2 operation requires Microso Bluetooth® 5.2 will function as Bluetooth® 5.1 or lower	ft OS support. Until Microsoft OS support is available,
	ESPRIMO G7012A	ESPRIMO G7012A ESTAR
Component notes		re The listed product components and optional functions a not available in all region/countries; Energy Star certification only with Windows operating
	System is available in 3 different housing versions: Small version (0.87 Liter) ODD bay version (1.23 Liter)	system Base unit for TCO Certified generation 9;
	Internal Power supply version (1.85 Liter)	System is available in 3 different housing versions: Small version (0.87 Liter) ODD bay version (1.23 Liter)
		Internal Power supply version (1.85 Liter)

## Base unit

Base unit	ESPRIMO G7012A	ESPRIMO G7012A ESTAR
Mainboard		
Mainboard type	D4016-A	
Formfactor	proprietary	
Chipset	Integrated in CPU	
Processor quantity maximum	1	
Supported capacity RAM (max.)	64 GB	
Memory slots	2 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.
LAN	10/100/1,000 MBit/s Realtek RTL8111EPV	
Integrated WLAN	optional	
BIOS version	UEFI Specification 2.7	
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)	
Audio type	On board	
Audio codec	Realtek ALC257N	
Audio features	Internal speaker supports audio playback, High Definition a	audio
I/O controller on board		
Serial ATA total	2	
Controller functions	Serial ATA III (6 Gbit) NCQ AHCI	
Interfaces		
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) 2x USB 2.0 Type A	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) 2x USB 2.0 Type A
USB front	2x USB 3.2 Gen 2 (10 Gbps) Type-A 1x USB 3.2 Gen 2 (10 Gbps) Type-C (provides up to 15W)	2x USB 3.2 Gen 2 (10 Gbps) Type-A 1x USB 3.2 Gen 2 (10 Gbps) Type-C (provides up to 15W)
USB rear	1x USB 2.0 Type-A 3x USB 3.2 Gen 1 (5 Gbps) Type-A 1x USB 3.2 Gen 2 Type-C (10 Gbps, supports DisplayPort 1.4 and power delivery sink**) see flexible interface options	1x USB 2.0 Type-A 3x USB 3.2 Gen 1 (5 Gbps) Type-A 1 x USB 3.2 Gen 2 Type-C (10 Gbps, supports DisplayPort 1.4 and power delivery sink**) see flexible interface options
DisplayPort	1 (DisplayPort 1.4; DP++)	1 (DisplayPort 1.4; DP++)
HDMI	1 HDMI 2.1	1 HDMI 2.1
Ethernet (RJ-45)	1	1
Interface Module notes	**With power delivery sink support, the system is operated by the power from peripherals, e.g. port replicators or displays. An extra power supply for the system is not needed. Peripherals must provide min. 60Watt or 90Watt (for maximum CPU performance).	**With power delivery sink support, the system is operated by the power from peripherals, e.g. port replicators or displays. An extra power supply for the system is not needed. Peripherals must provide min. 60Watt or 90Watt (for maximum CPU performance).
Kensington Lock support	1	1

Input device / components	
Input devices (optional)	Keyboard Mouse
Drive bays	
Drive bays total	2
2.5-inch internal bays	1
5.25-inch external bays	1
Drive bay notes	5.25" bay: for slim optical disc drive only as option with ODD bay housing version;
M.2-2280	1 x on mainboard (PCle 3.0 x4; up to 32Gbit/s) and 1 x optional (PCle 3.0 x4; up to 32Gbit/s)
Slots	
M.2-2230	on mainboard for WLAN module
Graphics on board	
Graphics brand name	AMD Radeon™ Graphics
Graphics features	Support for up to four independent displays DirectX® 12
	HDCP support
	OpenCL® 2.0 OpenGL® 4.6
	OpenGL - 4.6 Vulkan™
	DisplayPort interface supports Ver. 1.4 incl. Multi-Stream
	HDMI™ 2.1
	Digital audio formats are supported, including Dolby Digital Plus (7.1 channels) see flexible interface options
Base unit	ESPRIMO G7012A ESPRIMO G7012A ESTAR
Electrical values	
Power efficiency note	90 Watt AC adapter: power supply efficiency at 115/230V: 89% average efficiency 150 Watt internal PLATINUM power supply (optional):  Power supply efficiency in % at 10% / 20% / 50% / 100% load for 230V; 90/93/94/94 for 115V; 90/91/93/92
Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Operating voltage range	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz
Max. output of single power supply	AC Adapter: 90 W internal PLATINUM power supply (optional): 150 W
Base unit	ESPRIMO G7012A ESPRIMO G7012A ESTAR
Power consumption	
Power consumption note	See white paper Energy Consumption
Noise emission	
Related Processors for noise	AMD Ryzen 5 PRO 5650U processor and 8GB, no 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	2.9 B / 16 dB(A) Bystander; 16 dB(A) Operator position (SSD M.2)
50% load	
Standard noise operation mode: HDD load	3.0 B / 16 dB(A) Bystander; 17 dB(A) Operator position (SSD M.2)
Standard noise operation mode: Idle mode	2.9 B / 16 dB(A) Bystander; 16 dB(A) Operator position (SSD M.2)
Standard noise operation mode: Office applications 2.0	
Dimensions / Weight / Environmental	
Dimensions (W x D x H)	146.5 x 164.5 x 36 mm

Dimensions / Weight / Environmental		
Dimension notes	With ODD drive bay, the dimensions are: $146.5 \times 164.5 \times 51 \text{ mm}$ (5.77 x 6.48 x 2.01 inch) With internal power supply version, the dimensions are: $146.5 \times 176.9 \times 71 \text{ mm}$ (5.77 x 6.97 x 2.80 inch)	
Operating position	Vertical / horizontal (feet included)	
Weight	Base: Min:0.86kg; 1x mem,1xSDD Max:1.025kg; 2x mem,2xSSD,HDD,Flexi,WLAN ODD vers.: Min:1.2kg/Max:1.29kg int. PSU vers.: Min:1.45kg/Max:1.59kg AC adapt.(0.32kg), power cord(0.175kg) not part of min/m	nax
Weight (lbs)	Base: Min: 1.89 lbs / Max: 2.246lbs ODD version: Min:2.65 lbs / Max:2.84 lbs Int. PSU version: Min:3.2 lbs / Max:5.51 lbs AC adapter (0.71lbs) and power cord 0.39lbs) are not part	of min/max 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 G7012A-1 (AC Adapter) ESPRIMO G7012A-2 (Internal PSU)	ESPRIMO G7012A ESTAR1 (AC Adapter) ESPRIMO G7012A ESTAR2 (Internal PSU)
Model	MPCG	
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)	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 8.0 EPEAT® Gold (dedicated regions) TCO Certified, generation 9
Compliance link	https://sp.ts.fujitsu.com/sites/certificates	
Additional Software		
Additional software (preinstalled)	McAfee® LiveSafe™ (provides award-winning antivirus pro installed) Microsoft Office (1 month trial for new Microsoft® Office 3	
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 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 G7012A	ESPRIMO G7012A ESTAR
Security		
Physical Security	Kensington Lock support Eye for padlock	

Security	
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 (Legacy Standby no longer supported) 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
User Security	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) AuthConductor Client Basic (secure authentication solution)
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	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch WoL (Wake on LAN) DASH Out-of-Band management supporting real time inventory, remote on/ off, text console redirection
Manageability software	DeskView Client DeskView Instant BIOS Management
DeskView components	BIOS Management incl. Security Inventory Management Driver Management Alarm Management
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	https://www.fujitsu.com/global/products/computing/pc/manageability/
Miscellaneous	
	Thermal management Extended lifetime (internal power supply version only)
Accessories information	Further helpful options  Desktop Accessories: http://www.fujitsu.com/global/products/computing/peripheral/accessories/desktop/ http://www.fujitsu.com/global/products/computing/peripheral/accessories/connectivity/  Stands and Mounting kits: http://www.fujitsu.com/global/products/computing/peripheral/accessories/desktop/ums/index.html Available Adapters: http://globalsp.ts.fujitsu.com/dmsp/Publications/public/pos-connectivity.pdf
Packaging information	
Packaging dimension (mm)	395 x 197 x 288 mm
Packaging dimension (inch)	15.55 x 7.76 x 11.34 inch

Packaging information	
Packaging notes	If keyboard is included in packaging: 1.) packaging dimension is increasing to: $497 \times 206 \times 293 \text{mm} / (19.6 \times 8.11 \times 11.5 \text{ inch})$ ; 2.) max. quantity/pallet = 42; printed user documentation is bleached in chlorin free process; Bulk packaging for projects (optional)
Warranty	
Warranty period	1 year
Warranty type	Bring-In / Onsite Service (depending on country)
Warranty Terms & Conditions	http://www.fujitsu.com/warranty
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: https://support.ts.fujitsu.com/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	5 years
Service Weblink	http://www.fujitsu.com/emeia/products/product-support-services/

## **Recommended Accessories**

Thunderbolt™ 4 Port Replicator	First Thunderbolt™ Port Replicator on the market providing enhanced Order Code: security and full support of Intel® AMT (vPro®). FPCPR401BP  The universal port can easily connect almost everything with a single cable and high speed-data transfer. This smart workspace solution keeps your desk clean and tidy.
USB Type-C Port Replicator 2	Connect to your peripherals. Adapt to the task on demand. The universal USB Type-C interface supports you to get your peripheral devices S26391-F3327-L100 connected easily. Multiply your USB ports to connect your peripherals as well as your external display via HDMI, DisplayPort or VGA.  You also can charge your external USB devices without the need of any additional charger.
USB Port Replicator PR09	The Fujitsu USB Port Replicator PR09 is the perfect solution for shared desk environments within a hyperconnected world. It connects your S26391-F6007-L500 mobile system to your main peripherals with a single USB plug. This Port Replicator is equipped with the most powerful DisplayLink chipset supporting high performance video streaming with Dualhead-DisplayPort. Highest data throughput is guaranteed due to an USB Type-C based Gen2 Hub-Controller enabling up to 10 Gbit/s data streaming. The newest version of USB Power Delivery chipset (PD3.0) provides powerful charging during your workday.
AIO Display P2410	The Fujitsu AIO Display P2410 is the universal display unit for Mini PCs like ESPRIMO Gx012/13 Small and FUTRO S7011 to be connected via USB Type-C to enables All-in-One like usage. It comes with front and side USB connectors for ergonomic comfort and optional side optical drive for wide range of usage.
Mounting Kit for Height Adjustable Fujitsu Displays - up to 11th Gen. Display (2022)	The Fujitsu Mounting Kit for Height Adjustable Fujitsu Displays has been specifically (2022) designed for use with ESPRIMO Q/G Mini PCs, FUTRO Thin Clients and Fujitsu Displays. With this solution you can save space on the desk, reduce clutter on desk and realize a clean desk working environment.

Mounting Kit for Height Adjustable Fujitsu Displays - up to 10th Gen. Display



The Fujitsu Mounting Kit for Height Adjustable Fujitsu Displays has been specifically designed for use with ESPRIMO Q/G Mini PCs, FUTRO Thin Clients and Fujitsu Displays. With this solution you can save space on the desk, reduce clutter on desk and realize a clean desk working environment.

Order Code: \$26361-F2542-L452

**Universal Monitor Stand** 



Save desk space without compromising productivity with the Universal Monitor Stand that brings together a Desktop ESPRIMO Mini PC (G Series Small and ODD plus Q Series) or Thin Client FUTRO and a VESA compatible Fujitsu Display. For optimum ergonomics the height and tilt angle of the display can be adjusted, whilst hassle-free installation of the devices on the stand makes the life of your IT department easier.

Order Code: S26361-F2601-L700

### More information

### Fujitsu products, solutions & services

In addition to Fujitsu Desktop ESPRIMO G7012A, 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/

Software www.fujitsu.com/software/

### More information

Learn more about Fujitsu Desktop ESPRIMO G7012A, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.

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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