

Fujitsu recommends Windows 10 Pro.

# Data Sheet

## FUJITSU Desktop ESPRIMO P420 E85+

### Your Immediately Deliverable Office PC

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The FUJITSU ESPRIMO P420 delivers high-quality computing for your office applications and projects at a very attractive price point. You can choose cost-optimized fixed configurations for immediate delivery. Alternatively, you can use configuration options to meet your specific hardware needs, while staying within your budget.

#### High performance and best price/performance ratio

Cost-effective system for price-conscious customers

- 4th generation Intel® Core™ processor family

#### Flexibility

Freedom of choice with tailored systems, perfect fit for specific requirements

- Flexible logistic concept - optional customizing program

#### Reliability

High-quality and functional stability

- Development and production in Europe

#### Lifecycle

Hardware continuity for long-term projects

- Managed lifecycle up to 12 months

#### Meets ENERGY STAR® requirements

Low power consumption and low costs, without any loss in performance

- Power supply with 85% efficiency



# Components

<b>Processor</b>	Intel® Core™ i7-4790 processor (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB, Intel® HD Graphics 4600) * Intel® Core™ i5-4690 processor (4 Cores / 4 Threads, 3.50 GHz, up to 3.9 GHz, 6 MB, Intel® HD Graphics 4600) * Intel® Core™ i5-4590 processor (4 Cores / 4 Threads, 3.30 GHz, up to 3.7 GHz, 6 MB, Intel® HD Graphics 4600) * Intel® Core™ i5-4460 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.4 GHz, 6 MB, Intel® HD Graphics 4600) Intel® Core™ i3-4170 processor (2 Cores / 4 Threads, 3.70 GHz, 3 MB, Intel® HD Graphics 4400) Intel® Pentium® processor G3460 (2 Cores / 2 Threads, 3.50 GHz, 3 MB, Intel® HD Graphics) Intel® Pentium® processor G3260 (2 Cores / 2 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics) Intel® Celeron® processor G1840 (2 Cores / 2 Threads, 2.80 GHz, 2 MB, Intel® HD Graphics)
	*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)
<b>Operating systems</b>	
<b>Operating system pre-installed</b>	Windows 10 Pro Windows 8.1 Pro Windows 8.1 Windows 7 Professional 64-bit Windows 7 Professional 32-bit
<b>Operating system compatible</b>	Windows 10 Pro (license + recovery media only) openSUSE Linux
<b>Memory modules</b>	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM 4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM 8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
<b>Hard disk drives (internal)</b>	SSD SATA III Premium, 512 GB, 2.5-inch SSD SATA III Premium, 256 GB, 2.5-inch SSD SATA III Premium, 128 GB, 2.5-inch SSD SATA III, 256 GB, 2.5-inch SSD SATA III, 128 GB, 2.5-inch SSD SATA III, 256 GB, 2.5-inch, SED SSD SATA III, 128 GB, 2.5-inch, SED SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch SSHD SATA III, 5,400 rpm, 500 GB, 2.5-inch HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch HDD SATA II, 5,400 rpm, 320 GB, 2.5-inch
<b>Hard disk notes</b>	Up to 20 GB of HDD space is reserved for system recovery SSHD (Solid State Hard Disk, Hybrid drive) SSD (Solid State Disk) SED (Self-Encrypting Drive)
<b>Graphics</b>	NVIDIA® NVS™ 315, 1 GB NVIDIA® GeForce® GTX 745 2 GB FH, 2 GB NVIDIA® GeForce® GT630 DisplayPort 2GB FH, 2 GB NVIDIA® GeForce® 605 DisplayPort 1GB FH, 1 GB LFH59/ 2x DVI-I adapter cable LFH59/ 2x DP adapter cable DVI-I to VGA Adapter DP to DVI-D (single link) Adapter Cable AMD® Radeon R9 255 FH, 2 GB

<b>Drives (optional)</b>	BD Triple Writer SATA slim (tray)
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 24in1 USB 2.0 3.5"

<b>Interface add on cards/components (optional)</b>	USB 3.0 PCIe x1
	Gigabit Ethernet PCIe x1, DS
	Dual serial card PCIe x1

## Base unit

<b>Base unit</b>	ESPRIMO P420 E85+
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<b>Mainboard</b>	
Mainboard type	D3230
Formfactor	µATX
Chipset	Intel® H81
Processor socket	LGA 1150
Processor quantity maximum	1
Supported capacity RAM (max.)	16 GB
Memory slots	2 DIMM (DDR3)
Memory frequency	1,600 MHz
Memory notes	Dual channel support For dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules).
LAN	10/100/1,000 MBit/s Realtek RTL8111G
BIOS version	AMI Aptio 4.6
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
Audio type	On board
Audio codec	Realtek ALC671
Audio features	High Definition Audio, 5.1 surround sound

<b>I/O controller on board</b>	
Serial ATA total	3
thereof SATA III	2
Controller functions	Serial ATA II (3 Gbit) Serial ATA III (6 Gbit) NCQ AHCI

<b>Interfaces</b>	
Audio: line-in	1
Audio: line-out	1
Front audio: microphone	1
Front audio: headphone	1
USB 2.0 total	6
USB 3.1 Gen1 (USB 3.0) total	2
USB front	2x 2.0
USB rear	2x 2.0/ 2x 3.0
USB internal	2x 2.0
VGA	1
DVI	1 (DVI-D)

**Interfaces**

Mouse / Keyboard (PS/2)	1/1
Ethernet (RJ-45)	1

**Input device / components**

	Optical USB wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse KBPC PX ECO Mouse M440 ECO

**Drive bays**

Drive bays total	5
3.5-inch internal bays	2
3.5-inch external bays	1
5.25-inch external bays	2
Drive bay notes	3,5" bay can be used for 2,5" drives

**Slots**

PCI-Express 2.0 x16	1 x (210 mm / 8.27 inch) Full height
PCI-Express x1	2 x (190 mm / 7.48 inch) Full height

**Graphics on board**

Graphics brand name	Intel® HD Graphics, HD Graphics 4400, HD Graphics 4600 (depending on processor)
Shared video memory	up to 1,782 MB
TFT resolution (VGA)	1,024 x 768 pixel 1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,600 x 1,200 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel
TFT resolution (DVI)	1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel 1,920 x 1,200 pixel
Graphics features	Dual display support DirectX® 11.1 HDCP support Open CL® 1.2 OpenGL® 4.0
Graphics notes	up to 1 GB dedicated video memory (main memory owned and locked for graphics use) Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz

**Electrical values**

Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 83% / 86% / 85% 0-Watt mode with hard-off switch
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	280 W
Power factor correction/active power	active
Monitor outlet	No

**Power consumption**

Power consumption note	See white paper Energy Consumption 0-Watt mode with hard-off switch
Link to Energy White Paper	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=f4725e85-5d74-41f1-99a0-7ef55a8d713d">http://docs.ts.fujitsu.com/dl.aspx?id=f4725e85-5d74-41f1-99a0-7ef55a8d713d</a>

**Heat dissipation**

Heat dissipation notes	See white paper Energy Consumption
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**Noise emission**

Related Processors for noise	Intel® Core™ i7 4770
Standard noise emission	2x2 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74
Standard noise notes / description	Bystander position
Standard noise operation mode: CPU 50% load	3.4 B / 21 dB(A) Bystander; 25 dB(A) Operator position
Standard noise operation mode: HDD load	3.4 B / 21 dB(A) Bystander; 26 dB(A) Operator position
Standard noise operation mode: Idle mode	3.4 B / 20 dB(A) Bystander; 26 dB(A) Operator position
Standard noise operation mode: ODD load	4.6 B / 32 dB(A) Bystander; 38 dB(A) Operator position
Standard noise operation mode: Office applications 2.0	3.4 B / 20 dB(A) Bystander; 26 dB(A) Operator position

**Dimensions / Weight / Environmental**

Dimensions (W x D x H)	175 x 425 x 353 mm 6.89 x 16.74 x 13.9 inch
Operating position	Vertical
Weight	9 kg
Weight (lbs)	20.22 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 P420
Model	MI4W
Germany	TÜV GS
Europe	CE
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) EPEAT® Gold (dedicated regions) ENERGY STAR® 6.0 (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)	Workplace Protect (secure authentication solution) Adobe® Reader® (pdf reader) McAfee Multi Access Security (anti-virus and internet security software; 60 days trial version) Win7: Fujitsu Recovery (hard disk based recovery) Win8: Microsoft Push Button Recovery (hard disk based recovery) Microsoft Office (buy license to activate the pre-installed Microsoft Office)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD BD (playback software for Blu-ray Disc™) CyberLink PowerDVD DVD (playback software for DVD) Nero Essentials XL

**Manageability**

<b>Manageability technology</b>	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) WoL (Wake on LAN)
<b>Supported standards</b>	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)

**Security**

<b>Physical Security</b>	Kensington Lock support Eye for padlock
<b>System and BIOS Security</b>	Boot sector virus protection Write protect option for the Flash EPROM Control of external interfaces
<b>User Security</b>	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional)

**Miscellaneous****Packaging information**

<b>Packaging dimension (mm)</b>	516 x 278 x 562 mm
<b>Packaging dimension (inch)</b>	20.31 x 10.94 x 22.13 inch
<b>Max. quantity / pallet</b>	24
<b>Material - Weight (g) Carton</b>	1280 g
<b>Material - Weight (lbs) Carton</b>	2.82 lbs
<b>Material - Weight (g) EPS / PS</b>	140 g
<b>Material - Weight (lbs) EPS / PS</b>	0.31 lbs
<b>Material - Weight (g) PE</b>	60 g
<b>Material - Weight (lbs) PE</b>	0.13 lbs
<b>Packaging notes</b>	printed user documentation is bleached in chlorine free process

**Warranty**

<b>Warranty period</b>	1 year
<b>Warranty type</b>	Bring-In / Onsite Service (for countries within region EMEA, for all other countries depending on local regulations)
<b>Warranty Terms &amp; Conditions</b>	<a href="http://support.ts.fujitsu.com/warranty">http://support.ts.fujitsu.com/warranty</a>

**Product Support Services - the perfect extension**

<b>Recommended Service</b>	9x5, Onsite Response Time: Next Business Day
<b>Spare Parts availability</b>	5 years after end of product life
<b>Service Weblink</b>	<a href="http://www.fujitsu.com/fts/services/support">http://www.fujitsu.com/fts/services/support</a>

## Recommended Accessories

**Display B24-8 TE Pro**

The FUJITSU Display B24-8 TE Pro is made for intensive office work. With visual and mechanical ergonomics this marble-grey display enables fatigue-free working for hours in front of the screen. The large 60.5 cm (23.8-inch) screen allows you to keep always track of all open applications. This high-quality display works unfailingly around the clock. Easy connectivity, manageability and usability help you increase your productivity.

Order Code:  
S26361-K1577-V140

**Mouse M440 ECO**

Fujitsu Mouse M440 ECO is made from 100% bio material and has a completely PVC free cable. The elegant M440 ECO works on nearly every surface and follows all your hand movements smoothly and precisely. It features two main buttons and as well as a scroll wheel providing comfortable computing to both right and left-handed users.

Order Code:  
S26381-K450-L200

**SOUNDSYSTEM DS E2000 Air**

The new more powerful SOUNDSYSTEM DS E2000 Air gives you impressive, well-balanced sound throughout the frequency band. It is an unbeatable USB speaker set with a surprisingly small form factor. The robust satellite speakers are decorated with a deluxe piano finish and the base is adorned with warm ambient lighting.

Order Code:  
S26391-F7128-L600

**UC&C USB Headset Stereo H650e**

The UC&C USB Headset Stereo H650e is the ultimate in style and functionality. Long, uncomfortable work calls are a thing of the past thanks to the cushioned ear pads and crystal clear sound. Adjustable headband and microphone provides the perfect fit for everyone. Optimized for Microsoft® Lync™ the headset displays a red 'in-call' LED to let your co-workers know when you're available, thus helping to boost office productivity.

Order Code:  
S26391-F7139-L10

**Keyboard KBPC PX ECO**

Fujitsu's KBPC PX ECO keyboard is the perfect contribution to Green IT. The keyboard is made out of 45% renewable raw material and comes with a PVC free USB cable. In addition, the KBPC PX ECO offers first class comfort and ergonomics. It attracts attention with its impressive modern design and useful extras.

S26381-K341-L1\*\* (\*\*:  
country specific variation)

**Keyboard KB900**

The KB900 is a very flat keyboard with extra low keys and spill-resistant protection. The elegant design and top-quality construction makes the KB900 the ideal input device for any PC or Notebook user. If you accidentally spill some water or coffee onto the keyboard, this special construction helps the liquid to flow away.

S26381-K560-L4\*\* (\*\*:  
Country specific variation)

## More information

### Fujitsu OPTIMIZATION Services

In addition to FUJITSU Desktop ESPRIMO P420 E85+, 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 P420 E85+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/fts/ESPRIMO](http://www.fujitsu.com/fts/ESPRIMO)

### 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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