

Fujitsu recommends Windows.

Data Sheet

FUJITSU ESPRIMO P920 E85+ Desktop PC

Excellent Performance, Expandability and Efficiency

FUJITSU ESPRIMO P920 PCs give you the absolute highest PC manageability, performance and expandability. With the 86% efficient power supply, you'll also save on energy costs. The use of identical components within the product family ensures perfect infrastructure compatibility. At retirement, Fujitsu's distinctive EraseDisk option wipes your data securely.

Microtower

Maximum performance and optimal extendability

- Top-quality, high-value microtower, 7 drive bays, 4 PCI express interfaces

Green technology

Fujitsu's contribution to environmental protection and sustainability

- Halogen-free printed circuit of mainboard, sophisticated product concept for the entire lifecycle

Quiet

Pleasant working environment due to an extremely quiet system

- Innovative hardware design, optimized cooling concept ensures silent operations

System management

Simple system administration for complex IT infrastructures

- Intel® vPro™ technology (depending on processor) and DeskView manageability suite

Energy efficiency and high performance

Low power consumption combined with high performance

- 4th generation Intel® Core™ processor family and a power supply with 85% energy efficiency



Components

Processor	<p>Intel® Core™ i7-4790 processor (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i7-4770 processor (4 Cores / 8 Threads, 3.40 GHz, up to 3.9 GHz, 8 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i5-4690 processor (4 Cores / 4 Threads, 3.50 GHz, up to 3.9 GHz, 6 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i5-4670 processor (4 Cores / 4 Threads, 3.40 GHz, up to 3.8 GHz, 6 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i5-4590 processor (4 Cores / 4 Threads, 3.30 GHz, up to 3.7 GHz, 6 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i5-4570 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 6 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i3-4160 processor (2 Cores / 4 Threads, 3.60 GHz, 3 MB, Intel® HD Graphics 4400)</p> <p>Intel® Core™ i3-4150 processor (2 Cores / 4 Threads, 3.50 GHz, 3 MB, Intel® HD Graphics 4400)</p> <p>Intel® Core™ i3-4130 processor (2 Cores / 4 Threads, 3.40 GHz, 3 MB, Intel® HD Graphics 4400)</p> <p>Intel® Pentium® processor G3450 (2 Cores / 2 Threads, 3.40 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Pentium® processor G3440 (2 Cores / 2 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Pentium® processor G3420 (2 Cores / 2 Threads, 3.20 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Pentium® processor G3250 (2 Cores / 2 Threads, 3.20 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Pentium® processor G3240 (2 Cores / 2 Threads, 3.10 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Pentium® processor G3220 (2 Cores / 2 Threads, 3.00 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Celeron® processor G1840 (2 Cores / 2 Threads, 2.80 GHz, 2 MB, Intel® HD Graphics)</p> <p>Intel® Celeron® processor G1820 (2 Cores / 2 Threads, 2.70 GHz, 2 MB, Intel® HD Graphics)</p> <p>Intel® vPro™ Logo with Intel® Core i5 and Core i7 processors *with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables) Intel® Smart Response Technology supported by Intel® Core™ i3, i5 and i7 processors</p>
Operating systems	
Operating system	<p>Windows 8.1</p> <p>Windows 8.1 Pro</p> <p>Windows 7 Professional 64-bit</p> <p>Windows 7 Professional 32-bit</p>
Operating system compatible	openSUSE Linux
Memory modules	<p>2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM</p> <p>4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM</p> <p>8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM</p>
Hard disk notes	<p>Up to 20 GB of HDD space is reserved for system recovery</p> <p>SED (Self-Encrypting Drive)</p> <p>SSD (Solid State Disk)</p> <p>SSHD (Solid State Hard Disk, Hybrid drive)</p>
Hard disk drives (internal)	<p>SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch</p> <p>SSHD SATA III, 5,400 rpm, 500 GB, 2.5-inch</p> <p>SSD SATA III Premium, 512 GB, 2.5-inch</p> <p>SSD SATA III Premium, 256 GB, 2.5-inch</p> <p>SSD SATA III Premium, 128 GB, 2.5-inch</p> <p>SSD SATA III, 256 GB, 2.5-inch, SED</p> <p>SSD SATA III, 256 GB, 2.5-inch</p> <p>SSD SATA III, 128 GB, 2.5-inch, SED</p> <p>SSD SATA III, 128 GB, 2.5-inch</p> <p>HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch</p> <p>HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch</p> <p>HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch, business critical</p> <p>HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch</p> <p>HDD SATA III, 7,200 rpm, 250 GB, 3.5-inch</p> <p>HDD SATA II, 5,400 rpm, 320 GB, 2.5-inch</p>

Graphics	NVIDIA® NVS 300, 512 MB
	NVIDIA® NVS 300, 1 GB
	NVIDIA® GeForce® GT630 DisplayPort 2GB FH "0-Watt", 2 GB
	NVIDIA® GeForce® 605 DisplayPort 1GB FH, 1 GB
	LFH59/ 2x DVI-I adapter cable
	LFH59/ 2x DP adapter cable
	DVI to VGA Adapter
	DP to DVI-D (single link) Adapter Cable
	DP Extension Card
	ATI Radeon® HD7350 1GB FH, 1 GB
	AMD® Radeon R9 255 FH, 2 GB
	2nd NVIDIA® Quadro® NVS 300, 512 MB
Drives (optional)	BD Triple Writer SATA slim (tray)
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 24in1 USB 2.0 3.5"
Interface add on cards/components (optional)	WLAN 802.11 a/g/n (2x2), (dedicated regions only, not for Indonesia)
	Parallel Interface
	Gigabit Ethernet PCIe x1, DS
	eSATA Interface
	Dual serial card PCIe x1

Base unit

Base unit	ESPRIMO P920 E85+
Mainboard	
Mainboard type	D3222
Formfactor	µATX
Chipset	Intel® Q87
Processor socket	LGA 1150
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3)
Supported capacity RAM (max.)	32 GB
Memory frequency	1,600 MHz
Memory notes	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.
LAN	10/100/1,000 MBit/s Intel® I217LM
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	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound
I/O controller on board	
Serial ATA total	6
thereof SATA III	6

I/O controller on board

thereof eSATA	2
Controller functions	Serial ATA II (3 Gbit) Serial ATA III (6 Gbit) NCQ AHCI RAID 0/1/5/10 Intel® Smart Response Technology (depending on CPU)

Interfaces

Audio: line-in	1
Audio: line-in / microphone	1
Audio: line-out	1
Front audio: microphone	1
Front audio: headphone	1
USB 2.0 total	10
USB 3.0 total	4
USB front	4x 2.0 or 2x 2.0/ 2x 3.0 (optional)
USB rear	4x 2.0 / 2x 3.0
USB internal	2
VGA	1
DisplayPort	1 (second DisplayPort optional)
DVI	1 (DVI-D)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	1 (optional) (25pin with EPP and ECP)
eSATA	1 (optional)
Interface Module notes	Anytime USB charge functionality

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	7
2.5-inch internal bays	1
3.5-inch internal bays	2
3.5-inch external bays	2
5.25-inch external bays	2

Slots

PCI-Express 3.0 x16	1 x (312 mm / 12.29 inch) Full height
PCI-Express 2.0 x4 (mech. x16)	1 x (312 mm / 12.29 inch) Full height
PCI-Express x1	2 x (170 mm / 6.7 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

Graphics on board

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
TFT resolution (DisplayPort)	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 2,560 x 1,440 pixel 2,560 x 1,600 pixel 3,840 x 2,160 pixel (requires Intel® Core™ i3, i5 or i7 processor)
Graphics features	Support for up to three independent displays DirectX® 11.1 HDCP support Open CL® 1.2 OpenGL® 4.0 One DisplayPort connector can be converted to DVI-D or HDMI with an optional external adapter For multi monitoring mode, graphics card and integrated graphics run in parallel (Microsoft® Windows® 7 or Windows 8)
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	http://docs.ts.fujitsu.com/dl.aspx?id=0da3863b-29c3-49ed-80f5-aa29332d01d1

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	A-weighted sound power level L _{wad} (in B) / Workplace related A-weighted sound pressure level L _{pAm} (in dB(A))
Standard noise operation mode: CPU 50% load	4.0 B / 26 dB(A) Bystander ; 31 dB(A) Operator position
Standard noise operation mode: HDD load	3.4 B / 21 dB(A) Bystander ; 26 dB(A) Operator position

Noise emission

Standard noise operation mode: Idle mode 3.3 B / 19 dB(A) Bystander; 23 dB(A) Operator position

Standard noise operation mode: ODD load 4.5 B / 31 dB(A) Bystander ; 36 dB(A) Operator position

Standard noise operation mode: Office applications 2.0 3.3 B / 19 dB(A) Bystander; 23 dB(A) Operator position

Blue angel noise emission according certification According to ISO 7779:2010, ECMA-74 for max. possible configuration

Blue angel noise notes / description A-weighted sound power level L_{wad} (in B); 1B = 10dB

Blue angel noise operation mode: HDD load 3.7 B = 37 dB (A)

Blue angel noise operation mode: Idle mode 3.3 B = 33 dB (A)

Blue angel noise operation mode: ODD load 4.5 B = 45 dB (A)

Dimensions / Weight / Environmental

Dimensions (W x D x H) 175 x 419 x 395 mm
6.89 x 16.5 x 15.56 inch

Operating position Vertical

Weight 11 kg

Weight (lbs) 24.25 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 P920

Model M15W

Germany TÜV GS
Blauer Engel / Blue Angel

Europe CE

USA/Canada FCC Class B
cCSAus

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 <http://globalsp.ts.fujitsu.com/sites/certificates>

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

Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) iAMT 9.0 (depending on CPU) WoL (Wake on LAN)
Manageability software	DeskView Client DeskView Instant BIOS Management DeskView Integration for Symantec Management Platform
DeskView components	Inventory Management BIOS Management Driver Management Security Management Alarm Management
Supported standards	DMI PXE WMI
Manageability link	http://www.fujitsu.com/fts/manageability

Security

Physical Security	Kensington Lock support Eye for padlock Integrated cabinet lock (optional)
System and BIOS Security	EraseDisk (optional) Boot sector virus protection Write protect option for the Flash EPROM Embedded security (TPM 1.2) Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces
User Security	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional)

Miscellaneous

Keyboard on (Special Fujitsu keyboard required)
Thermal management

Serviceability

EasyFix
EasyChange for HDD
EasyChange for optical drives

Packaging information

Packaging dimension (mm)	516 x 278 x 562 mm
Packaging dimension (inch)	20.31 x 10.94 x 22.13 inch
Max. quantity / pallet	28
Material - Weight (g) Carton	1405 g
Material - Weight (lbs) Carton	3.1 lbs
Material - Weight (g) EPS / PS	160 g
Material - Weight (lbs) EPS / PS	0.35 lbs
Material - Weight (g) PE	60 g
Material - Weight (lbs) PE	0.13 lbs
Packaging notes	printed user documentation is bleached in chlorine free process

Warranty

Standard Warranty	3 years (depending on country)
Service level	Bring-In / Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local regulations, minimum: 2 years material warranty)

Warranty**Warranty Terms & Conditions** <http://support.ts.fujitsu.com/warranty>**Maintenance and Support Services - the perfect extension****Recommended Service** 9x5, Response Time: Next Business Day**Spare Parts availability** 5 years after end of product life**Service Weblink** <http://www.fujitsu.com/fts/services/support>

Recommended Accessories

Display B23T-6 LED

The FUJITSU Display B23T-6 LED offers best ergonomics and usability for intensive office use with a 4-in-1 stand. High resolution for pin sharp pictures with modern applications

Order Code:
S26361-K1388-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

Busylight UC Lync

Boost communication and productivity in the office with the Busylight. The genius of this device is that it both advertises your present working state and promotes the use of Lync, making your office more efficient. Perfect for the work environment in open-plan offices, the Busylight makes users feel comfortable with Lync's features and eases the transition from traditional office internal telephone systems.

Order Code:
S26391-F7139-L30

HS E2000 Communicator Headset



The Fujitsu HS E2000 Communicator headset allows you to use your personal computer for Voice over IP (VoIP) in stereo audio quality. This premium headset is designed to provide superb audio quality and comfort for the telephony, internet chat, speech recognition, video conferencing and multimedia applications.

Order Code:
S26391-F7139-L5

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 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)

More information

Fujitsu OPTIMIZATION Services

In addition to FUJITSU ESPRIMO P920 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/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about FUJITSU ESPRIMO P920 E85+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
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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