Fujitsu recommends Windows.

Data Sheet
FUJITSU CELSIUS W520 Long Lifecycle Workstation

Combines Longevity with Workstation performance

If you need a powerful entry-level workstation, Fujitsu's CELSIUS W520 Long Lifecycle is the ideal choice. Comprehensive ISV certifications ensure your professional applications run smoothly. Your workplace is silent and user-friendly thanks to best-in-class noise emissions. Plus, the cold plug access at the front of the workstation lets you expand your storage capacity or change drives for enhanced working flexibility. It also supports your Long-term projects with stable functions and extended product availability.



Long lifecycle
Continuity and availability for long-term projects
- Microsoft® Windows XP driver support extends the lifetime, 7 slots in total, 2 PCI slots

Powerful workstation
Get more done in less time
- The fastest available processors, graphics cards and hard disk drives for entry-level 3D/CAD or DCC applications

Quality
Highest quality and reliability for continouos productivity
- Designed and manufactured in Germany

Leading workstation application certification
Maximum compatibility and performance with customer-preferred applications
- Full support for ISV applications and easy integration into existing IT environments

Easy and rapid change of hard disk drives
Quick upgrades and changes of hard disk drives
- Cold plug access at front

Components

Processor	Intel® Core™ i3-3220 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2500)
	Intel® Xeon® processor E3-1275v2 (4 Cores / 8 Threads, 3.50 GHz, up to 3.9 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1225v2 (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® vPro™ with all Intel® Xeon® processors
Operating systems	
Operating system	Windows 8.1 Pro 64-bit Windows 8.1 64-bit Windows 7 Professional 64-bit Windows 7 Professional 32-bit
Operating system compatible	Windows® XP Linux
Operating system notes	Certified for Red Hat© Enterprise Linux Certified for SUSE Enterprise Desktop Certified for SUSE Enterprise Server For some configurations third party drivers are currently not available or configuration restrictions may apply. Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via http://support.ts.fujitsu.com
Memory modules	4 GB (1 module(s) 4 GB) DDR3, unbuffered, 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, ECC, 1,600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
Graphics	Ultra-high-end 3D: NVIDIA® Quadro® K5000, 4 GB, 1,536 cores, PCIe x16, 1x Dual Link DVI-I, DVI-D, 2x DisplayPort
	High-end 3D: AMD FirePro™ W7000, 4 GB, 1,280 stream processors, PCIe x16, 4 x DisplayPort
	High-end 3D: NVIDIA® Quadro® K4000, 3 GB, 768 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: NVIDIA® Quadro® K2000D, 2 GB, 384 cores, PCIe x16, 2x Dual Link DVI-I
	Midrange 3D: NVIDIA® Quadro® K2000, 2 GB, 384 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: AMD FirePro™ W5000, 2 GB, 768 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: NVIDIA® Quadro® K600, 1 GB, 192 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: NVIDIA® Quadro® 410, 512 MB, 192 cores, PCIe x16, 1x DVI-I, 1x DisplayPort
	Professional 2D: NVIDIA® NVS™ 510, 2 GB, 16 cores, PCIe 2.0 x16, 4x miniDP, 4x miniDP/DP Adapter
	Professional 2D: NVIDIA® NVS™ 315, 1 GB, 48 cores, PCIe 2.0 x16, 2x LFH59 (DP/DVI-I)
	Professional 2D: NVIDIA® NVS™ 310, 512 MB, 16 cores, PCIe 2.0 x16, 2x DisplayPort
	Remote Graphics: CELSIUS RemoteAccess Dual Card, PCIe x1, 2x miniDP, PCoIP
	Remote Graphics: CELSIUS RemoteAccess Quad Card, PCIe x1, 4x miniDP, PCoIP

Hard disk drives (internal)	SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	SSHD SATA III, 5,400 rpm, 500 GB, 2.5-inch
	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, SED
	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch, SED
	SSD SATA III, 128 GB, 2.5-inch
	HDD SATA III, 10,000 rpm, 1,000 GB, 2.5-inch, business critical
	HDD SATA III, 10,000 rpm, 500 GB, 2.5-inch, business critical
	HDD SATA III, 7,200 rpm, 4,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 3,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. 24/7 ready (business critical HDDs required) Up to 20 GB of HDD space is reserved for system recovery SSHD (Solid State Hard Disk, Hybrid drive) SED (Self-Encrypting Drive) SSD (Solid State Disk)
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	CELSIUS W520power-L
Mainboard	
Mainboard type	D3167
Formfactor	ATX
Chipset	Intel® C216
Processor socket	LGA 1155
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3) ECC/non-ECC
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® 82579 LM
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)

Mainboard	
Audio type	On board
Audio codec	Conexant CX20642
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	2
thereof eSATA	2 (optional)
Controller functions	Serial ATA II (3 Gbit) Serial ATA III (6 Gbit) NCQ AHCI RAID 0/1/5/10 (Windows XP not supported) Intel® Smart Response Technology (depending on CPU)
SATA RAID support	0, 1, 10, 5
Interfaces	
Audio: in (rear)	2
Audio: out (rear)	1
Audio: in	1
Audio: out	1
Internal speakers	1
USB 2.0 total	10
USB 3.0 total	4
USB front	2x 2.0/ 2x 3.0
USB rear	6x 2.0 / 2x 3.0
USB internal	2
VGA	1 (depends on processor, via DVI to VGA adapter)
DisplayPort	1
DVI	1 (depends on processor)
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 tilt wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse Laser Mouse GL9000 Mouse M440 ECO Space Explorer USB KBPC PX ECO Keyboard
Drive bays	
Drive bays total	8
3.5-inch internal bays	4
3.5-inch external bays	2
5.25-inch external bays	2
Drive bay notes	Up to 4x 2.5-inch HDDs (cold plug) or Up to 4x 3.5-inch HDDs (cold plug) or Up to 2x 2.5-inch and 2x 3.5-inch HDDs (cold plug)
Slots	
PCI-Express 3.0 x16	1 x (312 mm / 12.29 inch) Full height
PCI-Express 2.0 x4 (mech. x16)	1 x (210 mm / 8.27 inch) Full height

Slots	
PCI-Express x1	3 x (312 mm (2x) / 170 mm (1x) mm / 12.29 inch (2x) / 6.69 inch (1x) inch) Full height
PCI (32-bit / 33 MHz)	2 x (312 mm / 12.29 inch) Full height
Graphics on board	
Shared video memory	up to 1,759 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)	1,360 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)	1,360 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
Graphics features	Dual display support DirectX® 10.1 or DirectX® 11 (depending on CPU) HDCP support Open GL® 3.1 Open CL® 1.1 For multi monitoring mode, graphics card and integrated graphics run in parallel (Microsoft® Windows® 7 or Windows 8)
Graphics notes	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) : 87% / 90% / 87%
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	500 W
Power factor correction/active power	active
Power supply output	1 graphics power rail (6pin connector / 17A@12V)
Noise for standard configuration (HDD, ODD)	
Noise Operation mode 4: High load	18 dB(A)
Noise Operation mode 5: Office applications	18 dB(A)
Standard noise emission	2x2 GB, HDD, ODD, Windows 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)) (depending on configuration)
Standard noise operation mode: HDD load	4.0 B / 24 dB(A) Bystander position
Standard noise operation mode: Idle mode	3.6 B / 21 dB(A) Bystander position

Noise for standard configuration (HDD, ODD)	
Standard noise operation mode: ODD load	4.7 B / 30 dB(A) Bystander position

Dimensions / Weight / Environmental	
Dimensions (W x D x H)	186 x 481 x 430 mm
Operating position	Vertical / horizontal
Weight	approx. 16 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 °C
Operating relative humidity	5 - 85 % (relative humidity)

Compliance	
Product	CELSIUS W520 POWER
Model	ETNA-S-D3167
Germany	TÜV GS
Europe	CE Nordic Swan
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 6.0 (dedicated regions) EPEAT® Gold (dedicated regions)
Compliance notes	Energy Star compliance may vary depending on actual configuration
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

Security	
Physical Security	Kensington Lock support Eye for padlock Seal option Intrusion switch Integrated cabinet lock (optional)
System and BIOS Security	EraseDisk 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) SmartCase Logon+ (optional)

Manageability	
Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch iAMT 8.0 (depending on CPU) WoL (Wake on LAN)
Manageability software	DeskView 10.x client management including:
DeskView components	On/Offline remote client management Detailed system inventory management and reports BIOS Management Remote power management System notifications Security Remote Control DeskView Helpdesk Integration WoL (Wake on LAN)
Miscellaneous	
	Keyboard on (Special Fujitsu keyboard required) Thermal management Extended lifetime Rack mountable (5U)
Packaging information	
Packaging dimension (mm)	597 x 397 x 555 mm
Packaging dimension (inch)	23.5 x 15.63 x 21.85 inch
Max. quantity / pallet	24
Material - Weight (g) Carton	1858 g
Material - Weight (lbs) Carton	4.1 lbs
Material - Weight (g) EPS / PS	442 g
Material - Weight (lbs) EPS / PS	0.97 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	
Warranty period	3 years (depending on country)
Service level	Bring-In / Onsite Service (depending on country)
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty
Product Support Services - the perfect extension	
Recommended Service	9x5, Onsite 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 P24W-7 LED		If you're a pixel, color and performance-hungry professional using demanding applications, the FUJITSU P24W-7 LED Display is the perfect choice. The display provides outstanding picture performance thanks to a cutting-edge graphic panel. It also boasts unique and innovative features such as our patent-applied Presence Sensor technology and the Always Available Powered USB Hub. Energy Efficiency Class: A+	Order Code: S26361-K1498-V140
Blue LED Mouse GL9000		Blue LED Mouse GL9000 comes in a slim design with proven Fujitsu engineering quality. The state-of-the-art blue LED sensor enables ultra precise switchable resolution at 1,000, 1,500 and 2,000 dpi. Blue LED Mouse GL9000 makes your life easier because it's tailor-made for right handed users. It just feels great in your hand.	Order Code: S26381-K438-L100

SpaceMouse™ Pro		Using the SpaceMouse™ Pro 3D mouse to navigate 3D models or environments is as simple as holding them in your hand. A slight movement of the controller cap delivers easy and precise control. SpaceMouse™ Pro is a companion to the traditional mouse and is operated with the free hand. Your traditional mouse hand is free to select, create and edit.	Order Code: S26381-K459-L100
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 accidently 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 the FUJITSU CELSIUS W520 Long Lifecycle, 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 the FUJITSU CELSIUS W520 Long Lifecycle, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts/CELSIUS

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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