

Windows®. Life without Walls™.  
Fujitsu recommends Windows 7.

# Data Sheet

## Fujitsu CELSIUS W480 Workstation

Say hello to high-end graphics

The CELSIUS W480 is the advanced workstation for professional environments. Powered by the latest Intel® Processors, it is the ideal choice for business environments such as 3D CAD, financial forecasting and digital content creation. Thanks to the ISV certification process you can be guaranteed that your preferred professional applications will run with maximum speed and system stability.

### Extremely powerful workstations

Get more done in less time

- The fastest available processors, graphics cards and hard disk drives

### Noise-reduced system

Silent working environment

- Optimized thermal management, low-noise chassis and silent fans

### Serviceability

Minimum downtime in the event of system failure

- Service-friendly system design

### Leading workstation application certification

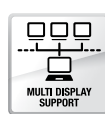
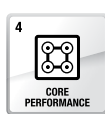
Maximum compatibility and performance with customer-preferred applications

- Full support for ISV applications and easy integration into existing IT environments

### Built to order

Free configurability for all product lines

- Customer is given a system optimized for his requirements



# Components

## Operating system

<b>Operating system</b>	Genuine Windows® 7 Professional 64-bit Genuine Windows® 7 Professional 32-bit Genuine Windows® 7 Home Premium 64-bit
<b>Operating system compatible</b>	Genuine Windows Vista® Business 64-bit Genuine Windows Vista® Business 32-bit Genuine Windows® XP Professional x64 Edition Genuine Windows® XP Professional Linux
<b>Operating system notes</b>	Red Hat® certification pending Novell® certification pending For some configurations third party drivers are currently not available or configuration restrictions may apply.

## Memory modules

2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM  
4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM

## Graphics add on cards (optional)

Ultra-high-end 3D: NVIDIA® Quadro® 5000, 2.5 GB, 352 cores, PCIe x16, DL-DVI-I, 2x DP, DVI, VGA  
High-end 3D: ATI FirePro™ V7800, 2 GB, 1140 stream processors, PCIe x16, DL-DVI-I, 2x DP  
High-end 3D: NVIDIA® Quadro® 4000, 2 GB, 256 cores, PCIe x16, DL-DVI-I, 2x DP  
Midrange 3D: ATI FirePro™ V5800, 1 GB, 800 stream processors, PCIe x16, DL-DVI-I, 2x DP  
Midrange 3D: NVIDIA® Quadro® 2000, 1 GB, 192 cores, PCIe x16, DL-DVI-I, 2x DP  
Midrange 3D: ATI FirePro™ V5900, 2 GB, 800 stream processors, PCIe x16, DL-DVI-I, 2x DP  
Entry 3D: ATI FirePro™ V4800, 1 GB, 400 stream processors, PCIe x16, DL-DVI-I, 2x DP  
Entry 3D: NVIDIA® Quadro® 600, 1 GB, 96 cores, PCIe x16, DL-DVI-I, DP  
Entry 3D: ATI FirePro™ V3800, 512 MB, 400 stream processors, PCIe x16, DL-DVI-I, DP  
Entry 3D: NVIDIA® Quadro® FX 380, 256 MB, 16 cores, PCIe x16, 2x DL-DVI-I  
Professional 2D: NVIDIA® Quadro® NVS 450, 512 MB, 2 x 8 cores, PCIe x16, 4 x DP  
Professional 2D: NVIDIA® Quadro® NVS 295, 256 MB, 8 Cores, PCIe x16, 2x DP  
Professional 2D: NVIDIA® Quadro® NVS 290, 256 MB, 16 cores, PCIe x16, 2x SL DVI-I  
Remote Graphics: CELSIUS RemoteAccess Card, PCIe x1, 2x DVI-I

## Hard disk drives (internal)

SSD SATA, 256 GB, 2.5-inch  
SSD SATA, 128 GB, 2.5-inch  
HDD SATA III, 10000 rpm, 600 GB, 3.5-inch internal  
HDD SATA III, 10000 rpm, 300 GB, 2.5-inch  
HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch, business critical  
HDD SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical  
HDD SATA II, 10000 rpm, 150 GB, 2.5-inch, S.M.A.R.T.  
HDD SATA II, 7200 rpm, 2000 GB, 3.5-inch, business critical  
HDD SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.  
HDD SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.  
HDD SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.  
HDD SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.  
HDD SATA II, 7200 rpm, 160 GB, 2.5-inch, S.M.A.R.T.

## Hard disk notes

One Gigabyte equals one billion bytes, when referring to hard disk drive capacity.  
2.5-inch drives will be mounted in the 3.5-inch bays

## Drives (optional)

Blu-ray Disc™ Triple Writer  
DVD-ROM  
DVD Super Multi  
MultiCard Reader 20in1, USB 2.0, 3.5-Inch  
MultiCard Reader 20in1 USB 3.0 front con., 3.5-Inch

**Interface add on cards/components  
(optional)**

WLAN III, 802.11g/Draft-n (Windows only)  
 USB 3.0 PCIe x1  
 Parallel Interface  
 Gigabit Ethernet PCIe x1  
 eSATA Interface  
 Dual serial card PCI

**Base unit** CELSIUS W480

**Mainboard**

<b>Mainboard type</b>	D2917
<b>Formfactor</b>	BTX
<b>Chipset</b>	Intel® 3450
<b>Processor socket</b>	LGA 1156
<b>Processor quantity maximum</b>	1
<b>Memory slots</b>	4 DIMM (DDR3) ECC/non-ECC
<b>Supported capacity RAM (max.)</b>	16 GB
<b>Memory frequency</b>	1333 MHz
<b>Memory notes</b>	In configurations with 4 GB and more the visible memory may be reduced to approximately 3.5 GB or less (for 32-bit operating systems) and configurations with 8 GB the visible memory may be reduced to approximately 7.5 GB or less (depending on system configuration).

**LAN** Built-in 10/100/1000 MBit/s Intel® 82578 DM

**Integrated WLAN** Optional (for Windows only)

**Audio codec** Realtek ALC663

**Audio features** 5.1 surround sound, High Definition audio, Internal speaker supports audio playback

**I/O Controller**

<b>Serial ATA total</b>	6
<b>thereof eSATA</b>	1, optional
<b>SAS RAID support</b>	0, 1, 10, 5

**Interfaces**

<b>Audio: in (rear)</b>	2
<b>Audio: out (rear)</b>	1
<b>Audio: in</b>	1
<b>Audio: out</b>	1
<b>FireWire (IEEE1394) (rear)</b>	1
<b>Internal speakers</b>	1
<b>USB 2.0 total</b>	13
<b>USB front</b>	2
<b>USB rear</b>	8
<b>USB internal</b>	2 + 1
<b>VGA</b>	1 (depends on processor)
<b>DisplayPort</b>	1 (depends on processor)
<b>DVI</b>	1 or 2, optional (depends on processor)
<b>Serial (RS-232)</b>	1, (9 pin)
<b>Mouse / Keyboard (PS/2)</b>	2
<b>Ethernet (RJ-45)</b>	1
<b>Parallel</b>	1, optional
<b>eSATA</b>	1, optional
<b>Interface Module notes</b>	Anytime USB charge functionality

**Drive bays**

<b>Drive bays total</b>	8
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**Drive bays**

3.5-inch internal bays	4
3.5-inch external bays	2
5.25-inch external bays	2

**Slots**

PCI-Express 2.0 x16	1 x (312 mm) Full height
PCI-Express 2.0 x4 (mech. x16)	1 x (190 mm) Full height
PCI-Express x1	2 x (300 mm) Full height
PCI (32-bit / 33 MHz)	3 x (312 mm)

**Graphics on board**

Shared video memory	up to 256 MB
Refresh rate 1024 x 768 (recommended / max.)	85 Hz
Refresh rate 1280 x 1024 (recommended / max.)	85 Hz
Refresh rate 1600 x 1200 (recommended / max.)	85 Hz
TFT resolution (VGA)	1360 x 768 pixel 1440 x 900 pixel 1680 x 1050 pixel 1920 x 1200 pixel
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1680 x 1050 pixel 1920 x 1200 pixel
Graphics notes	Graphics controller integrated in dual-core processors. For quad-core processors graphics card is mandatory. Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size For TFT we recommend using 60Hz

**Electrical values**

Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Max. output of single power supply	500 W

**Noise for standard configuration (HDD, ODD, FDD)**

Noise emission	According to ISO9296 (LpAm at bystander position)
Idle mode	21 dB
Office mode	21 dB(A)
Noise notes / description	Actual noise emissions may vary depending on configuration

**Dimensions / Weight / Environmental**

Dimensions (W x D x H)	203 x 426 x 442 mm
Operating position	Vertical / horizontal
Weight	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 W480
Model	MTB-D2917
Germany	GS optional Blauer Engel / Blue Angel optional
Europe	CE
USA/Canada	FCC Class B cCSAus

**Compliance**

<b>Global</b>	RoHS (EU & China) ENERGY STAR® 5.0 Medical EMC standard IEC60601-1-2 in combination with medical kit
<b>Compliance notes</b>	Energy Star compliance may vary depending on actual configuration
<b>Compliance link</b>	<a href="https://sp.ts.fujitsu.com/sites/certificates/default.aspx">https://sp.ts.fujitsu.com/sites/certificates/default.aspx</a>

**Security**

<b>System protection</b>	Kensington Lock support Eye for padlock Seal option Intrusion switch Optional: Integrated cabinet lock
<b>Audit proof protection</b>	Write protect option for the Flash EPROM Embedded security (TPM 1.2) Disable / Hide TPM option
<b>Access protection</b>	Hard disk password User and supervisor BIOS password Optional: Access protection via SmartCard reader Optional: SmartCase Logon+

**Additional Software**

<b>Additional software (optional)</b>	Drivers & Utilities DVD (DUDVD) Windows® 7 & Vista & XP Recovery DVD TwinLoad Windows® XP downgrade pack
<b>Additional software (included as a CD/DVD)</b>	Norton Internet Security (incl. Firewall)

**Manageability**

<b>Manageability technology</b>	DeskUpdate Driver management
<b>Manageability software</b>	DeskView 10.x client management including:
<b>DeskView components</b>	On/Offline remote client management Detailed system inventory management and reports BIOS Management Remote power management System notifications Security Remote Control DeskView Helpdesk Integration
<b>Supported standards</b>	WMI BootP (made4you) PXE
<b>Manageability link</b>	<a href="http://ts.fujitsu.com/solutions/it_infrastructure_solutions/manageability/featurefinder.html">http://ts.fujitsu.com/solutions/it_infrastructure_solutions/manageability/featurefinder.html</a>

**Input device / components**

<b>Input devices (optional)</b>	Optical USB tilt wheel mouse Optical USB/PS2 tilt wheel mouse Space Explorer USB Space Navigator USB Space Pilot USB Keyboard
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**Warranty**

<b>Standard Warranty</b>	3 years (depending on country)
<b>Service level</b>	On-site Service (depending on country)
<b>Maintenance and Support Services - the perfect extension</b>	
<b>Recommended Service</b>	5x9, Response Time: Next Business Day
<b>Service Weblink</b>	<a href="http://ts.fujitsu.com/Supportservice">http://ts.fujitsu.com/Supportservice</a>

## More information

### Fujitsu platform solutions

In addition to Fujitsu CELSIUS W480, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

#### Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

#### Computing Products

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

#### Software

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

### More information

Learn more about Fujitsu CELSIUS W480, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
<http://ts.fujitsu.com/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 resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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FUJITSU Technology Solutions  
Website: <http://ts.fujitsu.com>  
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