

Fujitsu recommends Windows 10 Pro for business.

Data Sheet

FUJITSU Workstation CELSIUS W5011

VR Ready CAD Powerhouse

If you thought you would need to sacrifice performance, expandability, price or energy efficiency in a micro tower design – think again. The FUJITSU CELSIUS W5011 desktop workstation goes far and beyond with its innovative design, featuring maximum graphic performance and dual slot full-length graphics card support. With its best-in-class low-noise emissions, it enables a quiet and efficient working environment.

No compromise in terms of performance, expandability and price
Designed with CAD customers in mind: performance, reliability and great flexibility - at an affordable price

- Choose between the latest 11th generation Intel® Core™ processors or the powerful Intel® Xeon® W-1300 processor family
- Support of Windows 10 Pro
- Up to 128 GB DDR4 3,200 MT/s memory (incl. ECC)
- Dual slot full-length graphics cards (up to NVIDIA® Quadro RTX™ 5000)
- Broad choice of processors and professional graphics cards
- Support of 24/7 operation with reliable high-endurance and business critical drives

VR-ready desktop workstation

Innovative space-saving design - made in Europe

- 21 liter desktop micro tower workstation
- Powered by advanced VR-ready graphics cards, up to NVIDIA® Quadro RTX™ 5000
- Optimized thermal management and cooling solutions
- Enjoy a silent workplace environment thanks to low noise emission

The smartest micro tower workstation

Ultimate usability, reliability and ease of use

- Clean, clutter-free interiors with less cables and cold-plug technology for HDDs inside
- Tool-less access to components for easy access and upgrade
- High-speed data transfer with SSD NVMe
- Supports massive amount of data storage with 4 storage slots

Multiple application scenarios

Ideal for 3D CAD, CAE, design, multimedia, visualization and manufacturing

- Supports graphics-accelerated applications
- Advanced CPUs in combination with flash storage for best application performance
- Up to 8 monitors with the NVIDIA® Mosaic™ technology



Components

	CELSIUS W5011	CELSIUS W5011 ESTAR
Processor	Intel® Xeon® processor W-1390P (8 Cores / 16 Threads, 3.50 GHz, up to 5.1 GHz, 16 MB, Intel® UHD Graphics P750) ** Intel® Xeon® processor W-1370 (8 Cores / 16 Threads, 2.90 GHz, up to 5.0 GHz, 16 MB, Intel® UHD Graphics P750) ** Intel® Xeon® processor W-1350 (6 Cores / 12 Threads, 3.30 GHz, up to 5.0 GHz, 12 MB, Intel® UHD Graphics P750) * Intel® Core™ i9-11900K processor (8 Cores / 16 Threads, 3.5 GHz, 16 MB, Intel® UHD Graphics 750) ** Intel® Core™ i9-11900 processor (8 Cores / 16 Threads, 2.5 GHz, 16 MB, Intel® UHD Graphics 750) ** Intel® Core™ i7-11700K processor (8 Cores / 16 Threads, 3.6 GHz, 16 MB, Intel® UHD Graphics 750) ** Intel® Core™ i7-11700 processor (8 Cores / 16 Threads, 2.5 GHz, 16 MB, Intel® UHD Graphics 750) ** Intel® Core™ i5-11500 processor (6 Cores / 12 Threads, 2.70 GHz, 12 MB, Intel® UHD Graphics 750) *	
	Intel® vPro® Platform with all Intel® Xeon® processors Intel® vPro® Platform Logo with Intel® Core™ i5 10505, i5-11500, Intel Core i5-11600, Intel® Core™ i7 and Intel® Core™ i9 processors *with Intel® Turbo Boost Technology 2.0 (clock speed and performance will vary depending on workload and other variables) **with Intel® Turbo Boost Max Technology 3.0 (clock speed and performance will vary depending on workload and other variables)	
Operating systems		
Operating system pre-installed	Windows 10 Pro for Workstations Windows 10 Pro. Fujitsu recommends Windows 10 Pro for business. Windows 10 Home	Windows 10 Pro for Workstations Windows 10 Pro. Fujitsu recommends Windows 10 Pro for business. Windows 10 Home
	CELSIUS W5011	CELSIUS W5011 ESTAR
Memory modules	32 GB (module(s) 32 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, UDIMM 16 GB (module(s) 16 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, UDIMM 8 GB (module(s) 8 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, UDIMM 32 GB (module(s) 32 GB) DDR4, ECC, 3,200 MT/s, UDIMM 16 GB (module(s) 16 GB) DDR4, ECC, 3,200 MT/s, UDIMM 8 GB (module(s) 8 GB) DDR4, ECC, 3,200 MT/s, UDIMM	32 GB (module(s) 32 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, UDIMM 16 GB (module(s) 16 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, UDIMM 8 GB (module(s) 8 GB) DDR4, unbuffered, non-ECC, 3,200 MT/s, UDIMM 32 GB (module(s) 32 GB) DDR4, ECC, 3,200 MT/s, UDIMM 16 GB (module(s) 16 GB) DDR4, ECC, 3,200 MT/s, UDIMM 8 GB (module(s) 8 GB) DDR4, ECC, 3,200 MT/s, UDIMM
	CELSIUS W5011	CELSIUS W5011 ESTAR
Graphics	Ultra-high-end 3D: NVIDIA® Quadro RTX™ 5000, 16 GB, PCIe x16, 4 x DisplayPort, 1 x Virtual Link High-end 3D: NVIDIA® Quadro RTX™ 4000, 8 GB, PCIe x16, 3 x DisplayPort, 1 x Virtual Link Midrange 3D: NVIDIA® Quadro® P2200, 5 GB, PCIe x16, 4 x DisplayPort Entry 3D: NVIDIA® T600, 4 GB, PCIe x16, 4 x miniDP Entry 3D: NVIDIA® T400, 2 GB, PCIe x16, 3 x miniDP Entry 3D: NVIDIA® T1000, 4 GB, PCIe x16, 4 x miniDP Entry 3D: NVIDIA® Quadro® P620, 2 GB, PCIe x16, 4 x miniDP Entry 3D: NVIDIA® Quadro® P400 , 2 GB, PCIe x16, 3 x miniDP Entry 3D: NVIDIA® Quadro® P1000, 4 GB, PCIe x16, 4 x miniDP Others: MiniDP to DP Adapter Cable	Midrange 3D: NVIDIA® Quadro® P2200, 5 GB, PCIe x16, 4 x DisplayPort Entry 3D: NVIDIA® T600, 4 GB, PCIe x16, 4 x miniDP Entry 3D: NVIDIA® T400, 2 GB, PCIe x16, 3 x miniDP Entry 3D: NVIDIA® T1000, 4 GB, PCIe x16, 4 x miniDP Entry 3D: NVIDIA® Quadro® P620, 2 GB, PCIe x16, 4 x miniDP Entry 3D: NVIDIA® Quadro® P400 , 2 GB, PCIe x16, 3 x miniDP Entry 3D: NVIDIA® Quadro® P1000, 4 GB, PCIe x16, 4 x miniDP Others: MiniDP to DP Adapter Cable
	CELSIUS W5011	CELSIUS W5011 ESTAR
	CELSIUS W5011	CELSIUS W5011 ESTAR
Mass storage 2.5 inch size	SSD SATA III, 480 GB High Endurance, 1DWDP, 2.5-inch SSD SATA III, 960 GB High Endurance, 1DWDP, 2.5-inch	SSD SATA III, 480 GB High Endurance, 1DWDP, 2.5-inch SSD SATA III, 960 GB High Endurance, 1DWDP, 2.5-inch
Mass storage 3.5 inch size	HDD SATA III, 7,200 rpm, 2000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 4000 GB, 3.5-inch, business critical HDD SATA III, 7,200 rpm, 8000 GB, 3.5-inch, business critical	

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, 512 GB M.2 NVMe module (Gen4), SED SSD PCIe, 512 GB M.2 NVMe module (Value)	SSD PCIe, 1024 GB M.2 NVMe module (Gen4), SED SSD PCIe, 2048 GB M.2 NVMe module (Gen4), SED SSD PCIe, 512 GB M.2 NVMe module (Gen4), SED SSD PCIe, 512 GB M.2 NVMe module (Value)
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. SSD (Solid State Disk) SED (Self-Encrypting Drive)	
Optical drive	CELSIUS W5011	CELSIUS W5011 ESTAR
	DVD Super Multi, SATA DVD Super Multi ultra slim (tray), SATA BD Triple Writer SATA ultra slim (tray), SATA MultiCard Reader 15in1 USB 3.0 3.5", USB 3.0	DVD Super Multi ultra slim (tray), SATA BD Triple Writer SATA ultra slim (tray), SATA MultiCard Reader 15in1 USB 3.0 3.5", USB 3.0
Interfaces add on cards / components	CELSIUS W5011	CELSIUS W5011 ESTAR
	Intel® WI-FI 6 AX210 and Bluetooth 5.2 vPro, SRD 5.8GHz (dedicated regions only) Intel 2x1Gb Ethernet Adapter I350-T2 Gigabit Ethernet PCIe x1	Intel® WI-FI 6 AX210 and Bluetooth 5.2 vPro, SRD 5.8GHz (dedicated regions only)
Component notes	CELSIUS W5011	CELSIUS W5011 ESTAR
	The listed product components and optional functions are not available in all region/countries optional graphic connectors HDMI and DP will be available in 10/2021	The listed product components and optional functions are not available in all region/countries; Energy Star certification only with Windows operating system base unit for TCO Certified generation 8 optional graphic connectors HDMI and DP will be available in 10/2021

Base unit

Base unit	CELSIUS W5011	CELSIUS W5011 ESTAR
Mainboard		
Mainboard type	D3917	
Formfactor	proprietary	
Chipset	Intel® W580	
Processor socket	LGA 1200	
Processor quantity maximum	1	
Supported capacity RAM (max.)	128 GB	
Memory slots	DIMM (DDR4) ECC/non-ECC	
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. 3200 MHz may be clocked down to 2933/2400MHz depending on processor and memory configuration	
LAN	10/100/1,000 MBit/s Intel® I219LM	
Integrated WLAN	optional; Intel® Wi-Fi 6 AX210 (2x2/160) Gig+ and Bluetooth 5.2	
BIOS version	AMI Aptio V UEFI Specification 2.6	
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)	
Audio type	On board	
Audio codec	Realtek ALC623	
Audio features	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound	
I/O controller on board		
Serial ATA total	4	

I/O controller on board

Controller functions	Serial ATA III (6 Gbit) NCQ AHCI RAID 0/1/5/10
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Interfaces

Audio: line-in	1
Audio: line-out	1
Front audio: headset	1
USB 2.0 total	4
USB 3.2 Gen1 (5 Gbps) total	3
USB 3.2 Gen2 (10 Gbps) total	4 and 1 optional
USB 3.2 Gen2x2 (20 Gbps) total	1
USB front	2x USB 2.0 2x USB 3.2 Gen 2 1x USB 3.2 Gen 2x2 Type-C (supports up to 15W)
USB rear	2x USB 2.0 2x USB 3.2 Gen 1 2x USB 3.2 Gen 2 optional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPort 1.4 and power delivery (PD) up to 15W or 60W (occupies PCIe x16 slot)
USB internal	1x USB 2.0 or 1x USB 3.2 (Gen 1) Type A
VGA	no
DisplayPort	2 (third DP optional)
DVI	no
Serial (RS-232)	1 (optional serial port (9pin, 16 byte FIFO, 16550 compatible))
HDMI	optional
Ethernet (RJ-45)	1
Interface Module notes	Anytime USB charge functionality

Input device / components

Input devices (optional)	Keyboard Mouse	
Drive bays total	6	6
2.5-inch internal bays	1	1
3.5-inch internal bays	2	2
3.5-inch external bays	1	1
5.25-inch external bays	2	2
Drive bay notes	5,25" bays: one bay in HH format, one bay for slim optical disc drive only; internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws; optional screwless)	5,25" bays: one bay in HH format, one bay for slim optical disc drive only; internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws; optional screwless)
M.2-2280	2 x on mainboard for SSD NVMe: 1x PCIe 4.0 x4; up to 64Gbit/s; only with 11th generation CPUs 1x PCIe 3.0 x4; up to 32Gbit/s	2 x on mainboard for SSD NVMe: 1x PCIe 4.0 x4; up to 64Gbit/s; support with 11th generation CPUs only 1x PCIe 3.0 x4; up to 32Gbit/s

Slots

PCI-Express 3.0 x1	2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height
PCI-Express 3.0 x4 (mech. x16)	1 x (270 mm / 10.63 inch) Full height
PCI-Express 4.0 x16	1 x (270 mm / 10.63 inch) Full height
M.2-2230	on mainboard for WLAN/Bluetooth module

Graphics on board

Graphics brand name	Intel® UHD Graphics 730, Intel® UHD Graphics 750, Intel® UHD Graphics 630
Shared video memory	Up to half size of total system memory
TFT resolution (DisplayPort)	Up to 4,096 x 2,304 pixel

Graphics on board

TFT resolution (HDMI)	Up to 4,096 x 2,160 @ 60 Hz	
Graphics features	Support for up to three independent displays DirectX® 12 HDCP support OpenCL™ 2.1 OpenGL® 4.5 For multi monitoring mode, graphics card and integrated graphics run in parallel DisplayPort interface supports Ver. 1.4 incl. Multi-Stream Digital audio formats are supported, including Dolby Digital Plus (7.1 channels) DVI-D interface supports audio output if connected to the HDMI interface of a display via suitable adapter cables (not included) System provides one connector to be used for LAN or graphics Optional graphics connectors: HDMI™ 2.0b DisplayPort™ 1.4a USB Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 15W) USB Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 60W. Occupies PCIe x16 slot)	
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	
Base unit	CELSIUS W5011	CELSIUS W5011 ESTAR

Electrical values

Power efficiency note	Power supply efficiency in % at 10% / 20% / 50% / 100% load 80Plus PLATINUM 680W: for 230V ; 89/92/93/92 for 115V ; 88/91/92/90 80Plus PLATINUM 300W: for 230V ; 88/92/94/93 for 115V ; 87/91/92/91	
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	300W or 680 W (depending on PSU)	
Power factor correction/active power	active	
Power supply output	Power supply PLATINUM 680W: 2 graphics power rails (6 pin- and 8 pin connectors)	
Base unit	CELSIUS W5011	CELSIUS W5011 ESTAR

Noise emission

Standard noise emission	According to ISO 7779:2010, ECMA-74	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))	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	tbd	tbd
Standard noise operation mode: HDD load	tbd	tbd
Standard noise operation mode: Idle mode	tbd	tbd
Standard noise operation mode: ODD load	tbd	tbd
Standard noise operation mode: Office applications 2.0	tbd	tbd

Dimensions / Weight / Environmental

Dimensions (W x D x H)	180 x 304 x 375 mm
	7.09 x 11.97 x 14.76 inch
Operating position	Vertical
Weight	approx. 10 kg
Weight (lbs)	approx. 22.05 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	CELSIUS W5011	CELSIUS W5011 ESTAR
Model	MI7W	
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) Microsoft Secured-core PC certification (for selected configurations)	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) Microsoft Secured-core PC certification (for selected configurations) ENERGY STAR® 8.0 EPEAT® in progress (dedicated regions) TCO Certification in progress
Compliance link	https://sp.ts.fujitsu.com/sites/certificates	

Additional Software

Additional software (preinstalled)	Adobe® Reader® (pdf reader) McAfee® LiveSafe™ (provides award-winning antivirus protection for your PC and much more. 30 days trial pre-installed) Microsoft Office (1 month trial for new Microsoft® Office 365 customers. Buy 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 Microsoft® Office Professional 2019 Microsoft® Office Home and Business 2019 (A Microsoft Account is required to activate each copy of these products. For purchase and activation only in the region in which it was acquired.)	
Base unit	CELSIUS W5011	CELSIUS W5011 ESTAR

Security

Physical Security	Kensington Lock support Eye for padlock Integrated cabinet lock (optional) Cable Cover (optional; covers and secures the ports and cables on rear side)	Kensington Lock support Eye for padlock Integrated cabinet lock (optional) Cable Cover (optional; covers and secures the ports and cables on rear side)
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 ready (for configurations with NVMe SSD and w/o PCIe cards) Write protect option for the Flash EPROM Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces	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 ready (for configurations with NVMe SSD and w/o PCIe cards) Write protect option for the Flash EPROM Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces

Security		
User Security	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional) AuthConductor Client Basic (secure authentication solution)	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional) AuthConductor Client Basic (secure authentication solution)
Manageability		
Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) WoL (Wake on LAN) iAMT 15.0 (depending on processor)	
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	http://www.fujitsu.com/fts/manageability	
Packaging information		
Packaging dimension (mm)	439 x 296 x 499 mm	439 x 296 x 499 mm
Packaging dimension (inch)	17.28 x 11.65 x 19.65 inch	17.28 x 11.65 x 19.65 inch
Max. quantity / pallet	24	24
Material - Weight (g) Carton	1113 g	1113 g
Material - Weight (lbs) Carton	2.45 lbs	2.45 lbs
Material - Weight (g) EPS / PS	164 g	164 g
Material - Weight (lbs) EPS / PS	0.36 lbs	0.36 lbs
Material - Weight (g) PE	25 g	25 g
Material - Weight (lbs) PE	0.06 lbs	0.06 lbs
Packaging notes	printed user documentation is bleached in chlorine free process; Bulk packaging for projects (optional)	printed user documentation is bleached in chlorine free process; Bulk packaging for projects (optional)
Warranty		
Warranty period	3 years (depending on country)	
Warranty type	Bring-In / Onsite Service (for countries within region EMEA, for all other countries depending on local regulations)	
Warranty Terms & Conditions	http://www.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/emeia/products/product-support-services/	

Recommended Accessories

More information

Fujitsu products, solutions & services

In addition to the FUJITSU Workstation CELSIUS W5011, 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 Workstation CELSIUS W5011, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/emeia/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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