

Fujitsu recommends Windows 10 Pro.

# FUJITSU Workstation CELSIUS

Choose the right hardware to accelerate the software application



## Mobile Workstation

Elegant. Mobile. Power.

CELSIUS H: H760 - 15.6-inch  
H770 - 15.6-inch  
H970 - 17.3-inch



## Desktop Workstation

Develop, Simulate, Calculate and Visualize your Ideas

CELSIUS J: J550/2 (Small Form Factor)  
CELSIUS W: W570, W570power+, W550 Long Lifecycle  
CELSIUS M: M770, M740 Long Lifecycle  
CELSIUS R: R970 (dual-processor)



## Rack Workstation

Ideal for a 1:1 remote access solution

CELSIUS C: C740 (1U rack workstation)

### APPLICATION FIELDS



**CAD**  
Computer Aided Design



**CAE, SIM**  
Computer Aided Engineering & Simulation



**AEC**  
Architecture, Engineering and Construction



**M&E**  
Media & Entertainment



**GIS, O&G**  
Geographic Information System & Oil and Gas



**Healthcare**

### USAGE SCENARIO

2D and 3D technical drawing of physical objects, parts and assemblies (Product design, industrial design, modelling, model analysis)

Mechanical, thermal and fluid simulations  
Electronic design simulation

2D and 3D planning and construction (incl. BIM) of buildings, factories and infrastructure

Content creation, video editing, animation, photo retouching, special effects, design and photorealistic renderings

Geo data collection, processing and visualisation

Visualize and simulate biological and chemical systems  
Electronic Health & Medical Record (EHR, EMR), Personal Health Record (PHR)

### TYPICAL INDUSTRIES

All manufacturers:  
• Automotive, Aerospace, etc.

All industries

• Plants  
• Shipbuilding & Offshore industries  
• Tunnels and bridges  
• Urban planning

• Broadcasting  
• Film and animation studios  
• Agencies  
• Marketing

• Defense and government  
• Science and research  
• Cartography  
• Transportation

• Medical product vendors  
• Chemistry and Pharmacology  
• Hospitals  
• Biotechnology and Laboratory Diagnostics

### SOFTWARE

• Autodesk (AutoCAD, Inventor)  
• Dassault Systèmes (CATIA, 3DEXCITE, DeltaGen, SOLIDWORKS)  
• Siemens PLM (NX, Teamcenter)  
• PTC (Creo Parametric)

• ANSYS (Fluent, CFX, Mechanical)  
• Autodesk (Revit, Moldflow)  
• Dassault Systèmes (SIMULIA)  
• MSC Software (Nastran, Patran)  
• Siemens PLM (Tecnomatix, FiberSIM)

• Autodesk (AutoCAD, Revit)  
• AVEVA  
• Bentley (Microstation)  
• Hexagon (Geosystems, Metrology)  
• Nemetschek (Allplan)  
• Trimble (Sketchup Pro, Tekla BIMsight)

• Adobe (Premiere Pro, After Effects, Photoshop)  
• Autodesk (Maya, 3ds Max, VRED)  
• Avid (Media Composer)  
• Chaos Group (V-Ray)  
• Dassault Systèmes (ICEM Surf Design)

• ESRI (ArcGIS)  
• Intergraph (Geomeia)  
• Halliburton (Landmark, Pinnacle)  
• Paradigm (Echos RTM, Tech)  
• Schlumberger (Petrel, ECLIPSE, Omega)

Mostly in-house developed software like Syngo (Siemens Healthcare)  
Dassault Systèmes: Simulia

### TOP REQUIREMENTS

• Single-threaded app => high processor frequencies  
• Fast flash drives  
• Moderate storage capacity  
• Open GL graphics

• Multi-threaded app => high number of cores  
• Fast flash drives  
• Maximum memory  
• High storage capacity  
• Compute GPUs & 3D graphics

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• Fast flash drives  
• Moderate storage capacity  
• Open GL graphics

• Multi-threaded app => high number of cores  
• Fast flash drives  
• High storage capacity  
• Graphics: 2D and 3D

• Multi-threaded app => high number of cores  
• Fast flash drives  
• Maximum memory  
• High storage capacity  
• Compute GPUs & 3D graphics

• Long lifecycle models  
• Whisper quiet  
• Customization (Made4You)

### PRODUCTS

CELSIUS H  
CELSIUS J, W, M

CELSIUS M & R

CELSIUS H  
CELSIUS J & W

CELSIUS H  
CELSIUS W  
CELSIUS M

CELSIUS R

CELSIUS  
Long Lifecycle products

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	MOBILE WORKSTATIONS			DESKTOP WORKSTATIONS	
Series	CELSIUS H			CELSIUS J	CELSIUS W
Model	H760	H770	H970	J550/2	W550 (incl. Long Lifecycle model)
Form Factor	39,6 cm (15.6-inch) Full HD, UHD/4K	39,6 cm (15.6-inch) Full HD, UHD/4K	43,9 cm (17.3-inch) Full HD	Small Form Factor (SFF)	Micro Tower
Weight / liter	Weight: 2.75 kg	Weight: 2.75 kg	Weight: 3.3 kg	10 liter - single processor	29 liter - single processor
Noise emission	-	-	-	Whisper quiet: 21 dB(A)	Whisper quiet: 19 dB(A)
Processor (incl. cores & frequency)	Intel® Xeon® processor E3-1500 v5 family (max. 3.8 GHz) Intel® Core™ i7 processor (max. 3.8 GHz)	Intel® Xeon® processor E3-1500 v6 family (max. 4.2 GHz) Intel® Core™ i7 processor (max. 4.1 GHz)	Intel® Xeon® processor E3-1500 v6 family (max. 4.2 GHz) Intel® Core™ i7 processor (max. 3.9 GHz) Intel® Core™ i5 processor (max. 3.8 GHz)	Intel® Xeon® processor E3-1200 v5 and v6 family (max. 4 cores / 4.2 GHz) Intel® Core™ i7 processor (max. 4 cores / 4.2 GHz) Intel® Core™ i5 processor (max. 4 cores / 3.9 GHz) Intel® Core™ i3 processor (max. 2 cores / 3.9 GHz)	Intel® Xeon® processor E3-1200 v5 family (max. 4 cores / 4.0 GHz) Intel® Core™ i7 processor (max. 4 cores / 4.0 GHz) Intel® Core™ i5 processor (max. 4 cores / 3.9 GHz) Intel® Core™ i3 processor (max. 2 cores / 3.7 GHz)
Operating System (pre-installed)	Windows 10 Pro for Workstations Windows 7 Professional (available through downgrade rights from Windows 10 Pro)	Windows 10 Pro for Workstations	Windows 10 Pro for Workstations	Windows 10 Pro for Workstations Windows 7 Professional (available through downgrade rights from Windows 10 Pro)	Windows 10 Pro for Workstations Windows 7 Professional (available through downgrade rights from Windows 10 Pro)
Memory	Up to 64 GB, 4 SO DIMM memory slots, DDR4 - 2,133 MHz	Up to 64 GB, 4 SO DIMM memory slots, DDR4 - 2,400 MHz	Up to 64 GB, 4 SO DIMM memory slots, DDR4 - 2,400 MHz	Up to 64 GB, 4 UDIMM memory slots, non-ECC/ECC, DDR4 - 2,400 MHz	Up to 64 GB, 4 UDIMM memory slots, non-ECC/ECC, DDR4 - 2,133 MHz
Professional Graphics Cards	NVIDIA® Quadro® M600: 384 CUDA Cores NVIDIA® Quadro® M1000: 512 CUDA Cores NVIDIA® Quadro® M2000: 640 CUDA Cores	NVIDIA® Quadro® M620: 512 CUDA Cores NVIDIA® Quadro® M1200: 640 CUDA Cores NVIDIA® Quadro® M2200: 1024 CUDA Cores	NVIDIA® Quadro® P3000: 1280 CUDA Cores NVIDIA® Quadro® P4000: 1792 CUDA Cores (VR-ready) NVIDIA® Quadro® P5000: 2048 CUDA Cores (VR-ready)	Full height graphics cards: NVIDIA® Quadro®: up to P2000 AMD Radeon™ Pro WX: up to 3100	Up to 1x high-end 3D graphic card: NVIDIA® NVS®: up to 510 NVIDIA® Quadro®: up to P4000 AMD FirePro™: up to 7100
Compute Cards	-	-	-	-	-
Storage	SSD PCIe M.2 (Standard, FDE) SSD SATA FDE HDD SATA	SSD PCIe M.2 SED module SSD SATA M.2 SED module SSD SATA (Standard, SED)	SSD PCIe NVMe M.2 module (Standard, SED) SSD SATA M.2 module (Standard, SED) HDD SATA	M.2 module, Flash drive SSD PCIe M.2 NVMe, card or module SSD PCIe M.2 NVMe Highend, card or module SSD SATA (Standard, High Endurance, SED) HDD SATA (Standard, Business Critical, Enhanced Availability)	SSD PCIe M.2 NVMe Highend, card or module SSD SATA High Endurance SSD SATA (Standard, SED) HDD SATA (Standard, Business Critical, Enhanced Availability)
Drive bays	Modular bay: support for optical drives or 2nd battery Up to 14 hours of battery life (with 2nd battery)	Modular bay: support for optical drives or 2nd battery Up to 14 hours of battery life (with 2nd battery)	Up to 9 hours of battery life	3 in total	W550: 7 in total W550power: 9 in total
Slots / Interfaces	1x DC-in, 1x Audio line-in, 1x Audio line-out, 2 digital array microphones, 1x USB 2.0, 2x USB 3.1 Gen1, 1x USB Type-C™, 1x VGA, 1x DisplayPort, 1x RJ-45, 1x SmartCard slot, 1x SIM card slot, MultiCardReader, 1x Kensington Lock, 1x Docking Connector	1x DC-in, 1x Audio line-in, 1x Audio line-out, 2 digital array microphones, 1x USB 2.0, 2x USB 3.1 Gen1, 1x USB Type-C™, 1x VGA, 1x DisplayPort, 1x RJ-45, 1x SmartCard slot, 1x SIM card slot, MultiCardReader, 1x Kensington Lock, 1x Docking Connector	1x DC-in, 1x combo in/out, 2x digital array microphones, 3x USB 3.1 Gen 1, 2x USB Type-C™, 1x VGA, 1x DisplayPort, 1x RJ-45, 1x SmartCard slot, x SIM card slot, MultiCardReader, 1x Kensington Lock	Riser cards - 2 in total: 1x PCIe 3.0 x16, 1x PCIe 3.0 x4 (mech. x16) or 1x PCIe 3.0 x16 and 1x PCI	4 in total: 2x PCIe 3.0 x1 1x PCIe 3.0 x4 (mech. x16) 1x PCIe 3.0 x16
USB	4 in total (1x USB 2.0, 2x USB 3.0, 1x USB Type-C™)	4 in total (1x USB 2.0, 2x USB 3.0, 1x USB Type-C™)	5 in total (3x USB 3.1 Gen1, 2 x USB Type-C™)	12 in total (2x USB 2.0, 9x USB 3.1 Gen1; optional USB 3.1 Gen2 via add on card)	13 in total (6x USB 2.0, 7x USB 3.0)
Serial ATA	-	-	-	5	6
Power Supply	150 W	150 W	250 W	280 W - max. 92% efficiency	W550: max. 300 W - max. 92% efficiency W550power: max. 500 W - max. 93% efficiency
Others	Made in Japan Display: anti-glare, magnesium, 300 cd/ m <sup>2</sup> Common port replicator with LIFEBOOK/STYLISTIC PalmSecure™: optional, palm vein technology	Made in Japan Display: anti-glare, magnesium, 300 cd/ m <sup>2</sup> Common port replicator with LIFEBOOK/STYLISTIC PalmSecure™: optional, palm vein technology	Made in Germany Display: anti-glare, magnesium, 300 cd/ m <sup>2</sup> Thunderbolt 3 port replicator VR-ready	Made in Germany	Made in Germany W550power Long Lifecycle model: limited component offering, minimum 36 months lifecycle

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## DESKTOP WORKSTATIONS

Series	CELSIUS W	CELSIUS M	CELSIUS M	CELSIUS R
Model	W570 and W570power+	M740 Long Lifecycle	M770	R970
Form Factor	Micro Tower	Midi Tower	Midi Tower	Big Tower
Weight / liter	21 liter - single processor	38 liter - single processor	38 liter - single processor	49 liter - dual processor
Noise emission	Whisper quiet: 19 dB(A)	Whisper quiet: 20 dB(A)	Whisper quiet: 20 dB(A)	Whisper quiet: 23 dB(A)
Processor (incl. cores & frequency)	Intel® Xeon® processor E3-1200 v5 and v6 family (max. 4 cores / 4.2 GHz) Intel® Core™ i7 processor (max. 4 cores / 4.2 GHz) Intel® Core™ i5 processor (max. 4 cores / 4.1 GHz) Intel® Core™ i3 processor (max. 2 cores / 3.9 GHz)	Intel® Xeon® processor E5-2600 v4 family (max. 14 cores / 2.4 GHz)	Intel® Xeon® processor W-2100 family (max. 10 cores / 4.0 GHz)	Intel® Xeon® Platinum processor 8176 family (max. 2x28 cores / 2.8 GHz) Intel® Xeon® Gold processor 5100 and 6100 family (max. 2x18 cores / 4.1 GHz) Intel® Xeon® Silver processor 4100 family (max. 2x10 cores / 3.0 GHz)
Operating System (pre-installed)	Windows 10 Pro for Workstations Windows 7 Professional (available through downgrade rights from Windows 10 Pro)	Windows 10 Pro for Workstations Windows 7 Professional (available through downgrade rights from Windows 10 Pro)	Windows 10 Pro for Workstations Windows 7 Professional (available through downgrade rights from Windows 10 Pro)	Windows 10 Pro for Workstations Windows 7 Professional (available through downgrade rights from Windows 10 Pro)
Memory	Up to 64 GB, 4 UDIMM memory slots, non-ECC/ECC, DDR4 - 2,400 MHz	Up to 256 GB, ECC, 8 DIMM memory slots DDR4 - 2,400 MHz	Up to 256 GB, ECC, 8 DIMM memory slots DDR4 - 2,666 MHz	Up to 1024 GB, ECC, 16 DIMM memory slots (8 per processor), DDR4 - 2,666 MHz
Professional Graphics Cards	Up to 1x high-end 3D graphic card: NVIDIA® Quadro®: up to P2000 or P4000 (VR-ready) AMD Radeon™ Pro WX: up to 5100	Up to 2x ultra-high-end 3D graphics cards: NVIDIA® Quadro®: up to P6000 (VR-ready)	Up to 2x ultra-high-end 3D graphics cards: NVIDIA® Quadro®: up to P6000 (VR-ready) AMD Radeon™ Pro WX: up to W7100	Up to 3x ultra-high-end 3D graphics cards: NVIDIA® Quadro®: up to P6000 (VR-ready) AMD Radeon™ Pro WX: up to W7100
Compute Cards	-	NVIDIA® Tesla® K40	-	NVIDIA® Tesla®: up to M60
Storage	M.2 module, Flash drive SSD PCIe M.2 NVMe Highend, card or module SSD PCIe M.2 NVMe, card or module SSD SATA (Standard, High Endurance, SED) HDD SATA (Standard, Business Critical, Enhanced Availability)	SSD PCIe M.2 NVMe Highend card SSD PCIe M.2 NVMe card SSD SATA (Standard, High Endurance, SED) HDD SAS HDD SATA (Standard, Business Critical, Enhanced Availability)	SSD PCIe M.2 NVMe Highend, card or module SSD PCIe M.2 NVMe, card or module SSD SATA (Standard, High Endurance, SED) HDD SAS HDD SATA (Standard, Business Critical, Enhanced Availability)	SSD PCIe M.2 NVMe Highend, card or module SSD PCIe M.2 NVMe, card or module SSD SATA (Standard, High Endurance, SED) HDD SAS HDD SATA (Standard, Business Critical, Enhanced Availability)
Drive bays	W570: 5 in total W570power+: 7in total	12 in total	7 in total	12 in total
Slots	4 in total: 2x PCIe 3.0 x1 1x PCIe 3.0 x4 (mech. x16) 1x PCIe 3.0 x16	7 in total: 2 x PCI-Express 3.0 x16 1 x PCI-Express 3.0 x4 (mech. x16) 1 x PCI-Express 3.0 x4 (mech. x8) 1 x PCI-Express 2.0 x4 (mech. x16) 2 x PCI-Express 2.0 x1 (mech. x8)	7 in total: 2 x PCI-Express 3.0 x16 1 x PCI-Express 3.0 x8 2 x PCI-Express 3.0 x4 2 x PCI-Express 3.0 x1	8 in total: 4 x PCI-Express 3.0 x16 2 x PCI-Express 3.0 x8 1 x PCI-Express 3.0 x8 (Internal) 1 x PCI
USB	14 in total (6x USB 2.0, 7x USB 3.1 Gen1; optional USB 3.1 Gen2 via add on card)	13 in total (9x USB 2.0, 4x USB 3.1 Gen1)	10 in total (2x USB 2.0 optional, 6x USB 3.1 Gen1, 2x USB 3.1 Gen2 optional)	14 in total (9x USB 2.0, 4x USB 3.1 Gen1, 1x USB 3.1 Gen 2 optional)
Serial ATA	8	10	8	10
Power Supply	W570: max. 280 W - max 88% efficiency	600 W - max. 90% efficiency	450 W and 800 W - max. 90% efficiency	1000 W and 1300 W - max. 90% efficiency
Others	Made in Germany W570power+: VR-ready	Made in Germany Minimum lifecycle of 36 months VR-ready	Made in Germany VR-ready Cold-plug technology (Power supply, storage) VROC M.2	Made in Germany VR-ready VROC M.2

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### RACK WORKSTATIONS

<b>Series</b>	<b>CELSIUS C</b>
<b>Model</b>	<b>C740</b>
<b>Form Factor</b>	1U
<b>Weight / liter</b>	Single processor
<b>Noise emission</b>	-

**Processor (incl. cores & frequency)** Intel® Xeon® processor E5-2600 v4 family (max. 22 cores / 3.50 GHz)  
Intel® Xeon® processor E5-1600 v4 family (max. 8 cores / 3.70 GHz)

**Operating System (pre-installed)** Windows 10 Pro for Workstations  
Windows 7 Professional (available through downgrade rights from Windows 10 Pro)

**Memory** Up to 512 GB, ECC, 8 DIMM memory slots  
DDR4 - 2,400 MHz

**Professional Graphics Cards** 1x graphic card (double-height) or 2x graphics cards (single height):  
NVIDIA® Quadro®: up to P6000 (VR-ready)  
AMD Radeon™ Pro WX: up to W7100

**Compute Cards** NVIDIA® Tesla®: up to K80; M60

**Storage** SSD PCIe M.2 NVMe Highend, card or module  
SSD PCIe M.2 NVMe, card or module  
SSD SATA (Standard, High Endurance, SED)  
HDD SAS  
HDD SATA (Business Critical, Enhanced Availability)

**Drive bays** 5 in total

**Slots** 3 in total:  
1 x PCI-Express 3.0 x16 - 1 x double slot density or  
2 x single slot density  
1 x PCI-Express 3.0 x8 (mech. x 16) - single slot density

**USB** 4 in total  
(2 x USB 2.0, 2 x USB 3.1 Gen1)

**Serial ATA** 6

**Power Supply** 800 W - max. 94% efficiency

**Others** Made in Germany  
VR-ready