Fujitsu recommends Windows 11 Pro.



# **Data Sheet**

# Fujitsu Workstation CELSIUS R970power

# Unleash The Monster Inside

Do you require the maximum in performance for simulations, analysis, rendering or High Performance Computing? Fujitsu's CELSIUS R970power desktop workstation is designed to surpass all expectations. Achieving first-class benchmark results, this reliable, high-end dual processor desktop workstation is optimized for extremely demanding and memory intensive multi-threaded applications.

### Unleash the power

Achieve the maximum out of any demanding application

- Up to 2nd Gen Intel® Xeon® Scalable Processors
- Support of Windows 11 Pro
- Support of up to 1024 GB DDR4 2,933 ECC memory
- FUJITSU SSD PCle card (up to 2 x 2 TB)

# Maximum expandability

Broad selection and configurability options

- Broad choice of professional graphics cards from AMD and NVIDIA
- Up to two ultra-high-end, three high-end 3D or four mid-range graphic cards for simulation or photorealistic renderings

### Work around the clock

Certain components can be configured to support an extended lifetime usage

- Selection of top-quality components and comprehensive testing in certified in-house laboratories
- Full support for ISV applications and easy integration into existing IT environments

# We are (VR) ready

Enjoy a fully immersive and real-time virtual reality experience with low latency at high frame rates

■ Up to NVIDIA RTX<sup>™</sup> A6000 VR-ready graphics cards







# Components

	CELSIUS R970B (S26361-K1449-V565)	CELSIUS R970Bpower (S26361-K1449-V665)
Processor		Intel® Xeon® Silver processor 4215R (8C, 3.20 GHz, up to 4.0 GHz)
		Intel® Xeon® Silver processor 4214R (12C, 2.40 GHz, up to 3.5 GHz)
		Intel® Xeon® Silver processor 4210R (10C, 2.40 GHz, up to 3.2 GHz)
		Intel® Xeon® Gold processor 6240R (24C, 2.40 GHz, up to 4.0 GHz)
		Intel® Xeon® Gold processor 6226R (16C, 2.90 GHz, up to 3.9 GHz)
		Intel® Xeon® Gold processor 5220R (24C, 2.20 GHz, up to 4.0 GHz)
		Intel® Xeon® Gold processor 5218R (20C, 2.10 GHz, up to 4.0 GHz)
		Intel® Xeon® Platinum processor 8276 (28C, 2.20 GHz, up to 4.0 GHz, 10.4 GT/s)
		Intel® Xeon® Gold processor 6244 (8C, 3.60 GHz, up to 4.4 GHz, 10.4 GT/s)
		Intel® Xeon® Gold processor 6240 (18C, 2.60 GHz, up to 3.9 GHz, 10.4 GT/s)
		Intel® Xeon® Gold processor 5222 (4C, 3.80 GHz, up to 3.7 GHz, 10.4 GT/s)
Base unit	CELSIUS R970B (S26361-K1449-V565)	CELSIUS R970Bpower (S26361-K1449-V665)
Operating systems		
Operating system pre-installed	Windows 10 Pro. Fujitsu recommends Windows	11 Pro for business.
Operating system compatible		nd app availability may vary by region. Certain features require
Operating system notes	specific hardware (see aka.ms/windows11-spec)	
Operating system notes	Certified for Red Hat© Enterprise Linux Certified for SUSE Enterprise Desktop	
	Certified for SUSE Enterprise Server	
	Windows 11 requires for first device setup:	
	- Internet connectivity	
	- Microsoft account for Home editions or organiz	rational account (e.g. ADD) for Pro editions t and support new Windows releases for max. 5 years, depending on
	extension of hardware services through warrant	· · · · · · · · · · · · · · · · · · ·
	_	tatement under https://support.ts.fujitsu.com/IndexProdSupport.
	CELSIUS R970B (S26361-K1449-V565)	CELSIUS R970Bpower (S26361-K1449-V665)
Memory modules		8 GB (1 module(s) 8 GB) DDR4, registered, ECC, 2,933 MT/s
memory modules		16 GB (1 module(s) 16 GB) DDR4, registered, ECC, 2,933 MT/s
		32 GB (1 module(s) 32 GB) DDR4, registered, ECC, 2,933 MT/s
		64 GB (1 module(s) 64 GB) DDR4, registered, ECC, 2,933 MT/s
		512 GB (4 module(s) ) Intel® Optane™ persistent memory: 4x DCPMM 128GB 2666 MHz, 8x DDR4 RG 16GB 2933 MH:

	CELSIUS R970B (S26361-K1449-V565)	CELSIUS R970Bpower (S26361-K1449-V665)
Graphics		Ultra-high-end 3D: NVIDIA® RTX™ A6000, 48 GB, PCle x16, 4 x DisplayPort  Ultra-high-end 3D: NVIDIA® RTX™ A5000, 24 GB, PCle x16, 4 x DisplayPort  Ultra-high-end 3D: NVIDIA® Quadro® RTX 6000, 24 GB, PCle x16, 4 x DisplayPort, 1 x Virtual Link  Ultra-high-end 3D: NVIDIA® Quadro® P6000, 24 GB, PCle x16, 1 x Dual Link DVI-D, 4 x DisplayPort  Ultra-high-end 3D: NVIDIA® Quadro® GV100, 32 GB, PCle x16, 4 x DisplayPort  High-end 3D: NVIDIA® RTX™ A4500, 20 GB, PCle x16, 4 x DisplayPort  High-end 3D: NVIDIA® RTX™ A4000, 16 GB, PCle x16, 4 x DisplayPort  High-end 3D: NVIDIA® RTX™ A4000, 16 GB, PCle x16, 4 x DisplayPort  High-end 3D: NVIDIA® Quadro® RTX 4000, 8 GB, PCle x16, 3 x DisplayPort, 1 x Virtual Link  Others: MiniDP to DP Adapter Cable  Others: DP to DVI-D (single link) Adapter Cable
CELSIUS R970B (S26361-K1449-V565)	CELSIUS R970Bpowe	er (S26361-K1449-V665)
	CELSIUS R970Bpower (S26361-K1449-V665)	
Hard disk drive	HDD SATA III, 7,200 rpm, 1,000 GB, 2.5-inch, business critical HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 2,000 GB, 2.5-inch, business critical HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch, business critical HDD SATA III, 7,200 rpm, 4,000 GB, 3.5-inch, business critical SSD PCIe, 1024 GB M.2 NVMe Highend module SSD PCIe, 1x 2048 GB M.2 NVMe Highend card SSD PCIe, 1x 512 GB M.2 NVMe Highend card SSD PCIe, 1x1024 GB M.2 NVMe Highend card SSD PCIe, 2048 GB M.2 NVMe Highend module SSD PCIe, 256 GB M.2 NVMe Highend module SSD PCIe, 2x 1024 GB M.2 NVMe Highend card SSD PCIe, 2x 2048 GB M.2 NVMe Highend card SSD PCIe, 2x 512 GB M.2 NVMe Highend card SSD PCIe, 512 GB M.2 NVMe Highend module SSD PCIe, 512 GB M.2 NVMe module, SED SSD SATA III, 960 GB High Endurance, 1.5DWDP, 2.5-inch	
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. 24/7 ready (Business Critical HDDs or SAS HDDs or High Endurance SSDs required) Up to 20 GB of HDD space is reserved for system recovery SED (Self-Encrypting Drive) SSD (Solid State Disk)	
Base unit	CELSIUS R970B (S26361-K1449-V565)	CELSIUS R970Bpower (S26361-K1449-V665)
SCSI / SAS Controller	Intel VROC HW key Standard M.2	
	CELSIUS R970B (S26361-K1449-V565)	CELSIUS R970Bpower (S26361-K1449-V665)
	(	
Interfaces add on cards / components		WLAN 802.11ac (2x2) PCle x1 and BT 5, SRD 5.8GHz (dedicated regions only) PLAN EP X550-T2 2x10GBASE-T PLAN EM X557-T2 2x10GBASE-T PLAN EM 2x10Gb SFP+ Dual serial card PCle x1 Dual 10 Gigabit Ethernet PCle x8
Interfaces add on cards / components  Base unit	CELSIUS R970B (S26361-K1449-V565)	(dedicated regions only) PLAN EP X550-T2 2x10GBASE-T PLAN EM X557-T2 2x10GBASE-T PLAN EM 2x10Gb SFP+ Dual serial card PCle x1 Dual 10 Gigabit Ethernet PCle x8
Base unit		(dedicated regions only) PLAN EP X550-T2 2x10GBASE-T PLAN EM X557-T2 2x10GBASE-T PLAN EM 2x10Gb SFP+ Dual serial card PCle x1
		(dedicated regions only) PLAN EP X550-T2 2x10GBASE-T PLAN EM X557-T2 2x10GBASE-T PLAN EM 2x10Gb SFP+ Dual serial card PCle x1 Dual 10 Gigabit Ethernet PCle x8

Mainboard Chipset	Intel® C624	
Processor socket	Socket P	
Processor quantity maximum	2	
Supported capacity RAM (max.)	1,024 GB	
Memory slots	16 (8 per processor) DIMM (DDR4) ECC	
Memory frequency	2,933 MT/s	
Memory notes	6 memory channels, thereof 2 channels supporting 2 DIMMs per channel. For optimized 6 channel performance, a	
	minimum of 6 memory modules have to be ordered and the capacity per channel has to be the same. DDR4 2,933MHz may be clocked down to 2,666 or 2,400 or 2,133 depending on the processor.  Supports up to 2TB of main memory (offered on request). This requires dual CPU usage with selected CPUs and 128GB DDR4 memory modules.	
LAN	10/100/1,000 MBit/s Intel® I219LM and Intel® I210	
BIOS version	AMI Aptio V	
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	High Definition Audio	
I/O controller on board		
Serial ATA total	10	
thereof SATA III	10	
Controller functions	Serial ATA III (6 Gbit) AHCI RAID 0/1/5/10	
Interfaces		
Audio: in (rear)	1	1
Audio: out (rear)	1	1
Audio: in	1	1
Audio: out	1	1
Internal speakers	1	1
USB 2.0 total	9	9
USB 3.1 Gen1 (USB 3.0) total	4	4
USB 3.1 Gen2 total	optional via add on card	optional via add on card
USB front	2x USB 2.0; 2x USB 3.1 (Gen1); optional: 1x USB 3.1 Type-C (Gen2) via add on card and front adapter bay	2x USB 2.0; 2x USB 3.1 (Gen1); optional: 1x USB 3.1 Type-C (Gen2) via add on card and front adapter bay
USB rear	6	6
USB internal	3, thereof 1 type A	3, thereof 1 type A
Ethernet (RJ-45)	2	2
eSATA	1 (optional)	1 (optional)
Interface Module notes	Anytime USB charge functionality	Anytime USB charge functionality
Input device / components		
	Optical USB wheel mouse	
Input devices (optional)	Keyboard Optical USB tilt wheel mouse Optical USB wheel mouse	
Drive bays		
Drive bays total	12	
2.5-inch internal bays	8	
3.5-inch internal bays	4	
3.5-inch external bays	2	
5.25-inch external bays	1	

Drive bays		
Drive bay notes	Up to 8x 2.5-inch HDDs (cold plug) and 1x 2.5-inch SSD of	
	Up to 4x 3.5-inch HDDs (cold plug) and 1x 2.5-inch SSD of Up to 2x 2.5-inch and 2x 3.5-inch HDDs (cold plug) and 1x	
M.2-2280	1 x on mainboard (for PCIe SSD modules)	
Slots		
PCI-Express 3.0 x8	2 x (200 mm) Full height (1x PCle 3.0x8 per processor)	
PCI-Express 3.0 x16	4 x (340 mm / 13.39 inch) Full height (2x PCle 3.0x16 per p	processor)
PCI (32-bit / 33 MHz)	1 x (312 mm / 12.29 inch) Full height	
PCI-Express 3.0 x8 (internal)	1 x (170 mm / 6.69 inch) Full height (available with 2nd CPU)	
Graphics brand name		
Graphics notes	NVIDIA® Quadro® RTX 5000, RTX 6000, RTX8000 support NVLink	
Base unit	CELSIUS R970B (S26361-K1449-V565)	CELSIUS R970Bpower (S26361-K1449-V665)
Electrical values		
Power consumption note	500 W depending on configuration	650 W depending on configuration
Rated voltage range	100 V - 240 V	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz	50 Hz - 60 Hz
Operating voltage range	90 V - 264 V	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz	47 Hz - 63 Hz
Max. output of single power supply	1000 W up to 90% efficiency	1300 W up to 90% efficiency for an input voltage above
, , , , , , , , , , , , , , , , , , , ,	·	115 V 1000 W for an input voltage below 115 V
Power factor correction/active power	active	active
Power supply output	2 graphics power rails (8pin connector / 18.5A@12V)	3 graphics power rails (8pin connector / 18.5A@12V)
Base unit	CELSIUS R970B (S26361-K1449-V565)	CELSIUS R970Bpower (S26361-K1449-V665)
Noise for standard configuration (HDD, C Related Processors for noise		
Standard noise emission	Intel® Xeon® Gold processor 6240 8x4 GB, HDD, ODD, Windows	
Standard Hoise emission	According to ISO9296 (LpAm at bystander position)	
Standard noise notes / description	A-weighted sound power level Lwad (in B) / Workplace re	lated A-weighted sound pressure level LpAm (in dB(A))
Standard noise operation mode: CPU 50% load	4.7 B / 30 dB(A) Bystander position	
Standard noise operation mode: CPU		
90% load		
Standard noise operation mode: HDD load	3.9 B / 23 dB(A) Bystander position	
Standard noise operation mode: Idle	3.9 B / 22 dB(A) Bystander position	
mode		
Standard noise operation mode: ODD load	4.5 B / 28 dB(A) Bystander position	4.5B / 28 dB(A) Bystander position
Standard noise operation mode: Office	3.9B / 22 dB(A) Bystander position	3.9 B / 22 dB(A) Bystander position
applications 2.0		
Dimensions / Weight / Environmental		
Dimensions (W x D x H)	186 x 618 x 430 mm	
	7.32 x 24.3 x 16.9 inch	
Operating position	Vertical / horizontal	
Weight	approx. 20 kg	
Weight (lbs)	approx. 44.8 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)	

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Compliance		
Product	CELSIUS R970 CELSIUS R970power	
Model	ETNA-L	
Germany	GS	
dermany	depending on configuration	
Europe	CE	
USA/Canada	FCC Class B	
	cCSAus	
Global	RoHS (EU & China) Microsoft Operating Systems (HCT / HCL entry / WHQL) WEEE (Waste electrical and electronic equipment)	
Compliance notes	Product Name maybe followed by suffixes	
Compliance link	https://sp.ts.fujitsu.com/sites/certificates	
Additional Software		
Additional software (preinstalled)	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 2021  Microsoft® Office Home and Business 2021  (Need to buy license to activate the pre-installed Microsoft Office. Purchase and activation only in the region in which it was acquired.)	
Additional software (notes)	Use of accompanying and/or additional Software is subject to proactive acceptance of the respective License Agreements /EULAs/ Subscription and support terms of the Software manufacturer as applicable for the relevant Software whether preinstalled or optional. The software may only be available bundled with a software support subscription which – depending on the Software - may be subject to separate remuneration.	
Base unit	CELSIUS R970B (S26361-K1449-V565) CELSIUS R970Bpower (S26361-K1449-V665)	
Security		
Physical Security	Kensington Lock support Eye for padlock Intrusion switch Integrated cabinet lock (optional)	
System and BIOS Security	Embedded security (TPM 2.0) EraseDisk Boot sector virus protection Write protect option for the Flash EPROM 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)	
Workplace Embedded Tools	Access protection via internal smartCard reader (optional)  Auto BIOS Update via Fujitsu Server  Auto BIOS Update via customer server (optional)  Easy PC Protection (optional)  Easy Restore (optional)	

Security		
Security Security Notes	The properties of the product provide a baseline for product security and therefore end-customer IT security. However, these properties are not sufficient on their own to protect the product from all existing threats, such as intrusion attempts, data exfiltration and other forms of cyberattacks. To customize security settings, please use the configuration options as available for the respective product. During operation, the IT security of this product is within the responsibility of the respective administrator/end-user of the product. Please note, that Fujitsu as a manufacturer does not make any policy prescriptions or advocacy statements regarding IT security best practices and/or general product operation.	
Manageability		
Manageability technology	iAMT 11.6 (depending on processor)  DeskUpdate Driver management  PXE 2.1 Boot code  Wake up from S5 (off mode)  WoL (Wake on LAN)	
Manageability software	DeskView Client DeskView Instant BIOS Management	
DeskView components	Inventory Management BIOS Management Driver Management Security Management Alarm Management	
Supported standards	WMI (Windows Management Instrumentation) PXE (Preboot Execution Environment) DMI (Desktop Management Interface) SMBIOS (System Management BIOS) WBEM (Web Based Enterprise Management) CIM (Common Information Model)	
Manageability link	https://www.fujitsu.com/global/products/computing/pc/manageability/	
Miscellaneous		
	Rack mountable (5U)	
Spare part availability	5 years	
Packaging information		
Max. quantity / pallet	11	
Packaging notes	printed user documentation is bleached in chlorine free process	
Warranty		
Warranty period	3 years (depending on country)	
Warranty type	Bring-In / Onsite Service (for countries within region EMEIA, for all other countries depending on local regulations)	
Warranty Terms & Conditions	http://www.fujitsu.com/warranty	
Digital bug fixes	Subject to availability and following their generic release for the product, bug fixes and function-preserving patches for product-related software (firmware) can be downloaded from the technical support at: https://support.ts.fujitsu.com/free of charge by entering the respective product serial number. For application software supplied together with the product, please directly refer to the support websites of the respective software manufacturer.	
Product Support - the perfect extension		
Recommended Service	9x5, Onsite Response Time: Next Business Day	
Spare Parts availability	at least 5 years after shipment, for details see https://support.ts.fujitsu.com/	
Service Weblink	http://www.fujitsu.com/emeia/products/product-support-services/	

# **Recommended Accessories**

# Keyboard KB955



The KB955 is a very flat keyboard with extra low keys and spill-resistant protection. The elegant design and top-quality construction makes the KB955 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-K955-L4\*\* (\*\*: Country specific variation)

# More information

# Fujitsu products, solutions & services

In addition to the Fujitsu Workstation CELSIUS R970power, 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 R970power, 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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### Disclaimer

Please note that the data sheet reflects the technical specification with the maximum selection of components for the named system and not the detailed scope of delivery. The scope of delivery is defined by the selection of components at the time of ordering.

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The overall product has been designed and manufactured for general office use, regular personal use and ordinary industrial use.

### Contact

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