

Data Sheet

FUJITSU Server PRIMERGY RX4770 M5 Rack Server

Power for the backend of digitalization

FUJITSU Server PRIMERGY will give you the servers you need to power any workload and changing business requirements. As business processes expand so does the need for applications. Each has its own resource footprint, so you need a way to optimize your computing to better serve your users. PRIMERGY systems will help you match your computing capabilities to your business priorities with our complete portfolio of expandable PRIMERGY tower servers for remote and branch offices, versatile rack-mount servers as well as hyper-converged multi-node servers. They convince by business proven quality with a wide range of innovations, highest efficiency cutting operational cost and complexity, provide more agility in daily operations, and integrate seamlessly to let help you concentrate on core business functions.

FUJITSU Server PRIMERGY RX rack systems are versatile rack-optimized servers providing best-in-class performance and energy efficiency, and thus form the "standard" in each data center. PRIMERGY RX servers deliver more than 20 years of development and production know-how resulting in extremely low failure rates below market average, and lead to continuous operations and outstanding hardware availability.

PRIMERGY RX4770 M5

The FUJITSU Server PRIMERGY RX4770 M5 is an industry-standard x86 server system with four sockets, providing superior levels of performance, scalability and efficiency. This combination turns the server into an ideal platform for running databases and transactional applications, business intelligence (BI) workloads, back-end and in-memory databases as well as other compute-intensive applications. In addition, it substantially simplifies carrying out DC server optimization such as server virtualization or consolidation. Featuring the latest Intel® Xeon® Scalable Family processors with each up to 28 cores pushes this server to a

whole new level of compute performance to deliver more efficient business results. Thanks to the highly performant and superfast DDR4 memory technology with up to 6TB memory capacity and optionally up to 24x Intel® Optane™ DC Persistent Memory NV-DIMM modules along with excellent support for NVMe Flash drives, the system can handle complex, data-intensive workloads such as in-memory databases like SAP HANA® and real-time business analytics even easier than the previous generation. The PRIMERGY RX4770 M5 supports 12 Gbit/s SAS/SATA controllers with optional FBU. It can either come as a 16x 2.5-inch hot-plug storage drives holding base unit or in a base unit holding a total of 12x storage drives even for directly connected PCIe SSDs. An onboard dual-channel 10 Gbit/s Ethernet controller, together with 8 PCI-Express Gen3 slots, help to increase bandwidth for even faster time-to-business insights. With built-in redundancy and hot-pluggable components as well as advanced business-critical RAS features such as Resilient System- and Memory Technologies, the RX4770 M5 provides higher availability and uptime. Virtualization and consolidation of IT resources offer many benefits but can often lead to increased expenses for server administration. Therefore the PRIMERGY RX4770 M5 delivers state-of-the-art management capabilities with the latest generation integrated Remote Management Controller (iRMC S5) offering a variety of user-friendly functions to ensure a faster and more cost-effective infrastructure management, no matter whether the server is located in the server-room next door or in another part of the world.



Features & Benefits

Main Features	Benefits
<p>Innovation meets Performance</p> <ul style="list-style-type: none"> Wide choice of different types of Intel® Xeon® Scalable Processor Family. Each processor offers up to 28 cores, up to 56 threads, 12 memory channels enabling a significantly higher performance and efficiency. They rely on Intel® UltraPath Interconnect for an increased data rate between the CPUs. Intel® Optane™ DC persistent memory is an innovative memory technology that delivers a unique combination of affordable large capacity and persistence (non-volatility). It revolutionizes the data center memory-storage hierarchy of the past and brings massive data sets closer to the CPU for faster time to insight. In total, up to 15,360 GB main memory in a mixed mode (non-volatile memory + DDR4 @ 2,933 MT/s) are available. <p>Enhanced Features for enhanced Computing</p> <ul style="list-style-type: none"> Extended RAS-features for fail-safe operation: Built-in redundancy and hot-pluggable components, Advanced ECC, Memory Scrubbing, SDDC and DDDC. The RX4770 M5 comes with onboard LAN for basic LAN, DynamicLoM via OCP slot for extended requirements. A storage drive bay configuration with up to 16x 2.5-inch or up to 12x PCIe 2.5-inch SSD SFF*, complemented by internal M.2 devices for hypervisor installations. Our power supply units with up to 96% energy efficiency and Fujitsu's Cool-safe® Advanced Thermal Design for higher ambient temperatures in the data center are available for this server. <p>Foundation for Trust and Security</p> <ul style="list-style-type: none"> Fujitsu ServerView Suite including tools for installation and deployment, permanent status monitoring and control, free-of-charge BIOS, firmware and selected software updates plus TPM2.0 modules and latest operating system support are a great addition. <p>Revolutionize data center management</p> <ul style="list-style-type: none"> Fujitsu ServerView Suite is a free-of-charge management software including tools for installation and deployment, permanent status monitoring and control as well as BIOS, firmware and selected software updates. In addition FUJITSU Software Infrastructure Manager (ISM) provides converged management across multiple data centers. The new ISM Essential license, available free-of-charge provides essential server management and converged monitoring functions. 	<ul style="list-style-type: none"> Ready for the future and data growth scenarios with the performance of two processors – marking the standard of tomorrow with an increase in computing power. Several innovations make this new CPU generation (code-named "Cascade Lake") even more powerful than the current-generation Intel® Xeon® Scalable processors, enabling robust compute capability and increased memory bandwidth for demanding workloads. Intel® Optane™ DC persistent memory technology will transform critical data workloads – from cloud and databases, to in-memory analytics, and content delivery networks but also for future technologies such as Artificial Intelligence of Virtual Reality applications. Business-critical RAS features lower the risk for unplanned IT downtimes. The systems' enhanced set of features adds even more reliability, availability, and serviceability that customers need to run business-critical applications. The right Ethernet connection for all: Basic via onboard LAN, extended with DynamicLoM via OCP guarantees the highest flexibility to integrate the server into existing infrastructures – now and in future without overhauling the existing infrastructure. On top of that, this server is not only "greener", but also less expensive over time. Cool-safe® ATD and highly efficient hot-plug power supplies save energy costs. These features ensure lifecycle investment protection while the comprehensive tools of the Fujitsu ServerView Suite ease the administrators' life. Moreover, hardware and software security features are very important in a fast-paced world, especially considering cybercrime. Fujitsu offers comprehensive infrastructure management and server management solutions which is key to efficient data center operations. They provides all the functions for flexible and automated 24x7 IT operations and improves end-user productivity via intelligent and innovative system management solutions. ISM helps improve data center efficiency and overall IT Productivity with converged infrastructure management, paving the path to software-defined data center.

Technical details

PRIMERGY RX4770 M5			
Base unit	PRIMERGY RX4770 M5	PRIMERGY RX4770 M5 LC	PRIMERGY RX4770 M5 Performance
Housing types	Rack	Rack	Rack
Storage drive architecture	16x 2.5-inch SAS/SATA/PCIe, thereof max. 12x 2.5-inch PCIe	16x 2.5-inch SAS/SATA/PCIe, thereof max. 12x 2.5-inch PCIe	8x 2.5-inch SAS/SATA/PCIe
Power supply	Hot-plug	Hot-plug	Hot-plug
Product Type	Quad Socket Rack Server	Quad Socket Rack Server	Quad Socket Rack Server
Mainboard			
Mainboard type	D3753		
Chipset	Intel® C624		
Processor quantity and type	2 or 4 x Intel® Xeon® Processor Scalable Family		
Mainboard type			
Processor quantity and type	2 or 4	4	4
Intel® Xeon® Gold Processor			
	Intel® Xeon® Gold 5215 (10C, 2.50 GHz, TLC: 13.75 MB, Turbo: 3.00 GHz, 10.4 GT/s, Mem bus: 2,666 MHz, 85 W, AVX Base 2.00 GHz, AVX Turbo 2.60 GHz)		
	Intel® Xeon® Gold 5215L (10C, 2.50 GHz, TLC: 13.75 MB, Turbo: 3.00 GHz, 10.4 GT/s, Mem bus: 2,666 MHz, 85 W, AVX Base 2.00 GHz, AVX Turbo 2.60 GHz)		
	Intel® Xeon® Gold 5215M (10C, 2.50 GHz, TLC: 13.75 MB, Turbo: 3.00 GHz, 10.4 GT/s, Mem bus: 2,666 MHz, 85 W, AVX Base 2.00 GHz, AVX Turbo 2.60 GHz)		
	Intel® Xeon® Gold 5217 (8C, 3.00 GHz, TLC: 11 MB, Turbo: 3.40 GHz, 10.4 GT/s, Mem bus: 2,666 MHz, 115 W, AVX Base 2.50 GHz, AVX Turbo 3.00 GHz)		
	Intel® Xeon® Gold 5218 (16C, 2.30 GHz, TLC: 22 MB, Turbo: 2.80 GHz, 10.4 GT/s, Mem bus: 2,666 MHz, 125 W, AVX Base 1.80 GHz, AVX Turbo 2.30 GHz)		
	Intel® Xeon® Gold 5220 (18C, 2.20 GHz, TLC: 24.75 MB, Turbo: 2.70 GHz, 10.4 GT/s, Mem bus: 2,666 MHz, 125 W, AVX Base 1.80 GHz, AVX Turbo 2.50 GHz)		
	Intel® Xeon® Gold 5222 (4C, 3.80 GHz, TLC: 16.5 MB, Turbo: 3.90 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 105 W, AVX Base 3.80 GHz, AVX Turbo 3.80 GHz)		
	Intel® Xeon® Gold 6230 (20C, 2.10 GHz, TLC: 27.5 MB, Turbo: 2.80 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 125 W, AVX Base 1.60 GHz, AVX Turbo 2.40 GHz)		
	Intel® Xeon® Gold 6240 (18C, 2.60 GHz, TLC: 24.75 MB, Turbo: 3.30 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 150 W, AVX Base 2.00 GHz, AVX Turbo 2.80 GHz)		
	Intel® Xeon® Gold 6240Y (18C, 2.60 GHz, TLC: 24.75 MB, Turbo: 3.30 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 150 W, AVX Base 2.00 GHz, AVX Turbo 2.80 GHz)		
	Intel® Xeon® Gold 6242 (16C, 2.80 GHz, TLC: 22 MB, Turbo: 3.50 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 150 W, AVX Base 2.30 GHz, AVX Turbo 3.10 GHz)		
	Intel® Xeon® Gold 6244 (8C, 3.60 GHz, TLC: 24.75 MB, Turbo: 4.30 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 150 W, AVX Base 3.00 GHz, AVX Turbo 3.90 GHz)		
	Intel® Xeon® Gold 6248 (20C, 2.50 GHz, TLC: 27.5 MB, Turbo: 3.20 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 150 W, AVX Base 1.90 GHz, AVX Turbo 2.80 GHz)		
	Intel® Xeon® Gold 6252 (24C, 2.10 GHz, TLC: 35.75 MB, Turbo: 2.80 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 150 W, AVX Base 1.70 GHz, AVX Turbo 2.40 GHz)		
	Intel® Xeon® Gold 6254 (18C, 3.10 GHz, TLC: 24.75 MB, Turbo: 3.90 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 200 W, AVX Base 2.70 GHz, AVX Turbo 3.40 GHz)		

Intel® Xeon® Platinum Processor	<p>Intel® Xeon® Platinum 8253 (16C, 2.20 GHz, TLC: 22 MB, Turbo: 2.50 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 125 W, AVX Base 1.70 GHz, AVX Turbo 2.00 GHz)</p> <p>Intel® Xeon® Platinum 8256 (4C, 3.80 GHz, TLC: 16.5 MB, Turbo: 3.90 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 105 W, AVX Base 3.70 GHz, AVX Turbo 3.70 GHz)</p> <p>Intel® Xeon® Platinum 8260 (24C, 2.40 GHz, TLC: 35.75 MB, Turbo: 3.10 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.90 GHz, AVX Turbo 2.60 GHz)</p> <p>Intel® Xeon® Platinum 8260L (24C, 2.40 GHz, TLC: 35.75 MB, Turbo: 3.10 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.90 GHz, AVX Turbo 2.60 GHz)</p> <p>Intel® Xeon® Platinum 8260M (24C, 2.40 GHz, TLC: 35.75 MB, Turbo: 3.10 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.90 GHz, AVX Turbo 2.60 GHz)</p> <p>Intel® Xeon® Platinum 8260Y (24C, 2.40 GHz, TLC: 35.75 MB, Turbo: 3.10 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.80 GHz, AVX Turbo 2.50 GHz)</p> <p>Intel® Xeon® Platinum 8268 (24C, 2.90 GHz, TLC: 35.75 MB, Turbo: 3.50 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 205 W, AVX Base 2.40 GHz, AVX Turbo 3.00 GHz)</p> <p>Intel® Xeon® Platinum 8270 (26C, 2.70 GHz, TLC: 35.75 MB, Turbo: 3.40 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 205 W, AVX Base 2.20 GHz, AVX Turbo 2.90 GHz)</p> <p>Intel® Xeon® Platinum 8276 (28C, 2.20 GHz, TLC: 38.5 MB, Turbo: 3.00 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.70 GHz, AVX Turbo 2.60 GHz)</p> <p>Intel® Xeon® Platinum 8276L (28C, 2.20 GHz, TLC: 38.5 MB, Turbo: 3.00 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.70 GHz, AVX Turbo 2.60 GHz)</p> <p>Intel® Xeon® Platinum 8276M (28C, 2.20 GHz, TLC: 38.5 MB, Turbo: 3.00 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 165 W, AVX Base 1.70 GHz, AVX Turbo 2.60 GHz)</p> <p>Intel® Xeon® Platinum 8280 (28C, 2.70 GHz, TLC: 38.5 MB, Turbo: 3.30 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 205 W, AVX Base 2.20 GHz, AVX Turbo 2.90 GHz)</p> <p>Intel® Xeon® Platinum 8280L (28C, 2.70 GHz, TLC: 38.5 MB, Turbo: 3.30 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 205 W, AVX Base 2.20 GHz, AVX Turbo 2.90 GHz)</p> <p>Intel® Xeon® Platinum 8280M (28C, 2.70 GHz, TLC: 38.5 MB, Turbo: 3.30 GHz, 10.4 GT/s, Mem bus: 2,933 MHz, 205 W, AVX Base 2.20 GHz, AVX Turbo 2.90 GHz)</p>
Processor notes	A minimum of 2 processors must be configured, no mix of different processor types
Memory slots	48 (12 DIMMs per CPU, 6 channels with 2 slots per channel)
Memory slot type	DIMM (DDR4 / DDR-T for non-volatile memory modules)
Memory capacity (min. - max.)	16 GB - 15 TB
Memory protection	<p>Advanced ECC</p> <p>Memory Scrubbing</p> <p>SDDC</p> <p>DDDC (Double Device Data Correction)</p> <p>Memory Mirroring support</p> <p>Rank sparing memory support</p> <p>ADDDC (Adaptive Double DRAM Device Correction)</p>
Memory notes	Max. 6 slots populated with DCPMM modules per CPU, please see relevant system configurator for details. Memory Mirroring Mode with identical modules in both channel pairs of a bank (4 or 6 modules per bank) per CPU. Rank Sparing Mode with minimum of 2 modules single ranked (1R) or dual ranked (2R) or 1 module quad ranked (4R) per CPU.
Standard memory modules	<p>8 GB (1 module(s) 8 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 1Rx8</p> <p>16 GB (1 module(s) 16 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 2Rx8</p> <p>16 GB (1 module(s) 16 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 1Rx4</p> <p>32 GB (1 module(s) 32 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 2Rx4</p> <p>64 GB (1 module(s) 64 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, DIMM, 2Rx4</p> <p>128 GB (1 module(s) 128 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, LRDIMM, 4Rx4</p> <p>64 GB (1 module(s) 64 GB) DDR4, registered, ECC, 2,933 MT/s, PC4-2933, LRDIMM, 4Rx4</p>

Non-volatile memory modules	256 GB (2 module(s) 128 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 1Rx4		
	512 GB (2 module(s) 256 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 2Rx4		
	512 GB (4 module(s) 128 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 1Rx4		
	1024 GB (4 module(s) 256 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 2Rx4		
	768 GB (6 module(s) 128 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 1Rx4		
	1536 GB (6 module(s) 256 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 2Rx4		
	3072 GB (6 module(s) 512 GB) DDR-T, registered, ECC, 2,666 MT/s, NVM, DCPMM, 4Rx4		
Interfaces			
USB 3.0 ports	5 x USB 3.0 (2x front, 2x rear, 1x internal)		
Graphics (15-pin)	2 x VGA (1 x front, 1 x rear)		
Serial 1 (9-pin)	1 x RS-232-C		
Management LAN (RJ45)	1 x dedicated management LAN port for iRMC S5 (10/100/1000 Mbit/s) Management LAN traffic can be switched to shared onboard LAN controller port, speed and connector is related to installed interface card.		
Onboard or integrated Controller			
RAID controller	All hardware storage controller options are described under Components		
SATA Controller	Intel® C624, 1 x SATA channel for ODD		
LAN Controller	DynamicLoM based on Intel® C624 (Intel® X722) Optional DynamicLoM OCP adaptors: 2 x 10 Gbit/s Ethernet (RJ45) 2 x 10 Gbit/s SFP+ 4 x 1 Gbit/s Ethernet (RJ45) 4 x 10 Gbit/s SFP+ All supported features are described in relevant system configurator. Wake-on-LAN supported on onboard Port 1. Extra LAN controller (PCIe Cards) are listed below. (i210 LAN card via project release possible)		
Remote management controller	Integrated Remote Management Controller (iRMC S5, 512 MB attached memory incl. graphics controller) IPMI 2.0 compatible		
Trusted Platform Module (TPM)	Infineon / TPM 1.2 or TPM 2.0 module; TCG compliant (option)		
Slots			
PCI-Express 3.0 x16	8 x whereas 4x full height and 4x low profile with up to 167mm length		
Slot Notes	Important note: 4 PCIe slots are supported with the first and second processor. Additional 4 PCIe slots are supported with the third and fourth processors. Slot 1&2: PCIe Gen3 x16 @CPU1 for low profile cards with up to 167mm length Slot 3&4: PCIe Gen3 x16 @CPU4 for full height cards with up to 167mm length Slot 5: PCIe Gen3 x16 @CPU2 for low profile cards with up to 167mm length Slot 6&7: PCIe Gen3 x16 @CPU3 for full height cards with up to 167mm length Slot 8: PCIe Gen3 x16 @CPU2 for low profile cards with up to 167mm length (used for the internal modular RAID controller if selected)		
Slots (Base unit specific)			
PCI-Express 3.0 x16	8 x	5 x PCIe slot 5, 6 & 7 not available; reserved for liquid cooling in/out	6 x PCIe slot 1 & 2 not available; reserved for additional air cooling
Drive bays			
Storage drive bays	2.5-inch hot-plug SAS/SATA/PCIe 2 x M.2 slot whereas slot 1 supports 80mm or 110mm and slot 2 supports 42mm or 80mm		
Notes accessible drives	All possible options described in relevant system configurator.		
Optional accessible drives	1 x 5.25/9.5mm for DVD-RW/Blu-ray		
Drive bays (Base unit specific)			
Storage drive bays	16 x 2.5-inch hot-plug SAS/SATA/PCIe	16 x 2.5-inch hot-plug SAS/SATA/PCIe	8 x 2.5-inch hot-plug SAS/SATA/PCIe
General system information			
Number of fans	12		
Fan configuration	hot-plug		
Fan notes	11+1 redundant		

Operating panel

Operating buttons	On/off switch NMI button Reset button ID button
Status LEDs	System status (green) Global error (orange) Identification (blue) Hard disks access (green) Power (green) CSS (orange) At system rear side: System status (green) CSS (orange) Identification (blue) Global error (orange) LAN connection (green) LAN speed (green / yellow)

BIOS

BIOS features	UEFI compliant Legacy BIOS compatibility customer configuration option Secure boot support ROM based setup utility GPT support for boot drives larger than 2.2 TB Memory Redundancy support (Mirroring, Sparing) IPMI support Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Linux versions Local and remote update via ServerView Update Manager IPv4/IPv6 remote PXE & iSCSI boot support Cryptographically Signed BIOS Firmware Update HTTP and HTTPS Boot PCIe Bifurcation configurable
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Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Windows Server 2019 Datacenter Windows Server 2019 Standard Windows Server Datacenter, version 1809 Windows Server Standard, version 1809 Hyper-V Server 2016 Windows Server 2016 Datacenter Windows Server 2016 Standard Windows Server Datacenter, version 1709 VMware vSphere™ 6.5 VMware vSphere™ 6.7 SUSE® Linux Enterprise Server 12 Red Hat® Enterprise Linux 7
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	Support of other Linux derivatives on demand

Server Management and Infrastructure Management

Standard	<ul style="list-style-type: none"> Infrastructure Manager (ISM) Essential <ul style="list-style-type: none"> Node Management Health status Monitoring and Control Capacity/Threshold Management Power Management Converged Management Auto Discovery Remote Management Update Management Logging and Auditing ServerView Suite (Deploy) <ul style="list-style-type: none"> ServerView Installation Manager ServerView Scripting Toolkit ServerView Suite (Control) <ul style="list-style-type: none"> ServerView Operations Manager (incl. PDA and ASR & R) ServerView Agents and CIM provider ServerView Agentless Management ServerView System Monitor SVOM- Event Manager ServerView RAID Manager SVOM- Threshold Manager Power Monitor (monitoring the Power Consumption) Power Management (iRMC) Storage Management (server) with SVOM/SV-RAID ServerView Suite (Maintain) <ul style="list-style-type: none"> iRMC S5 (Remote Management) System Update Manager (BIOS, Firmware, Windows Drives and SV Agents) Performance management (SVOM) Asset Management Primecollect Customer Self Service Online Diagnostics ServerView Suite (Integrate) <ul style="list-style-type: none"> ServerView Integration packs for MS System Center, VMware vCenter, VMware vRealize, Nagios, and HP SIM
Option	<ul style="list-style-type: none"> ServerView Suite (Maintain) <ul style="list-style-type: none"> ServerView eLCM iRMC Advanced Pack incl. Advanced Video Redirection (AVR), video capturing and Virtual Media Infrastructure Manager (ISM) <ul style="list-style-type: none"> Automate device configuration Mass OS installation Node Management Health status Monitoring and Control Capacity/Threshold Management Power Management Converged Management Auto Discovery Virtual-IO Management Network topology Management Remote Management Update Management Logging and Auditing Integrate in to <ul style="list-style-type: none"> Enterprise Management Vendor specific Management Monitor 3rd party platforms
Server Management notes	Regarding dependencies for ServerView Suite software products see dedicated product data sheets.
Dimensions / Weight	
Rack (W x D x H)	482.6 mm (Bezel) / 434.8 mm (Body) x 724.8 x 86.9 mm
Mounting Depth Rack	741.3 mm
Height Unit Rack	2 U
19" rackmount	Yes

Dimensions / Weight	
Mounting Cable depth rack	200 mm (1,000 mm Rack recommended)
Weight	max. 29.7 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option
Environment	
Operating temperature note	Cool-safe® Advanced Thermal Design (above 35 °C or below 10 °C) depending on configuration. For detailed information see relevant system configurator.
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Operating environment link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	47.4 dB(A) (idle) / 47.4 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	6.5 B (idle) / 6.5 B (operating)
Noise notes	Noise emissions depends on operation modes, system configuration and ambient temperature. Operating mode measured based on OLTIS with 50% load. *OLTIS = FUJITSU Load Profile which stresses all components of a server with a given load level.
Environmental (Base unit specific)	
Operating ambient temperature	5 - 40 °C (41 - 104 °F) 5 - 45 °C (41 - 113 °F) 5 - 35 °C (41 - 95 °F)
Electrical values	
Power supply configuration	2 hot-plug power supplies (standard), single power supply configuration possible
Hot-plug power supply redundancy	Optional
Active power (max. configuration)	2,335 W
Apparent power (max. configuration)	2360 VA
Heat emission (max. configuration)	8406.0 kJ/h (7967.3 BTU/h)
Rated current max.	20 A (100 V) / 8 A (240 V)
Active power note	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: http://configurator.ts.fujitsu.com/public/
Power supply	1600W hot-plug, 94% (Platinum efficiency), 200-240V, 50 / 60Hz
Power supply notes	Hot plug power supply redundancy with AC input Voltage at 200 - 240V only
Compliance	
Global	CB RoHS (Substance limitations in accordance with global RoHS regulations) WEEE (Waste electrical and electronic equipment)
Europe	CE
USA/Canada	CSAc/us ICES-003 / NMB-003 Class A FCC Class A
Japan	VCCI:V3 Class A + JIS 61000-3-2
South Korea	KN32 KN35
Australia/New Zealand	C-Tick (planned)
Taiwan	CNS 13438 class A - planned
Compliance link	https://sp.ts.fujitsu.com/sites/certificates
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request. * Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Components

Optical drives	Blu-ray Disc™ Triple Writer, (6x BD-RW, 8x DVD, 24x CD), ultraslim, SATA I DVD Super Multi ultra slim , (8x DVD; 24x CD), ultraslim, SATA I
Hard disk drives	HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, 512e, hot-plug, 2.5-inch, business critical HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, 512e, hot-plug, 2.5-inch, business critical
Hard disk drives	HDD SAS, 12 Gb/s, 900 GB, 15,000 rpm, 512n, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 900 GB, 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 900 GB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 600 GB, 15,000 rpm, 512n, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 600 GB, 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 600 GB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 600 GB , 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise, SED HDD SAS, 12 Gb/s, 300 GB, 15,000 rpm, 512n, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 300 GB, 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise, SED HDD SAS, 12 Gb/s, 300 GB, 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 2.4 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise, SED HDD SAS, 12 Gb/s, 2.4 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 2 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical HDD SAS, 12 Gb/s, 1.8 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise, SED HDD SAS, 12 Gb/s, 1.8 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 1.2 TB, 10,000 rpm, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 1.2 TB, 10,000 rpm, 512e, hot-plug, 2.5-inch, enterprise HDD SAS, 12 Gb/s, 1.2 TB , 10,000 rpm, 512n, hot-plug, 2.5-inch, enterprise, SED HDD SAS, 12 Gb/s, 1 TB, 7,200 rpm, 512n, hot-plug, 2.5-inch, business critical
Solid-State-Drive	SSD SATA, 6 Gb/s, 960 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 0.9 DWPD (Drive Writes Per Day for 5 years) SSD SATA, 6 Gb/s, 960 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years) SSD SATA, 6 Gb/s, 480 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 0.9 DWPD (Drive Writes Per Day for 5 years) SSD SATA, 6 Gb/s, 480 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3.6 DWPD (Drive Writes Per Day for 5 years) SSD SATA, 6 Gb/s, 240 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1.4 DWPD (Drive Writes Per Day for 5 years) SSD SATA, 6 Gb/s, 240 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3.6 DWPD (Drive Writes Per Day for 5 years) SSD SATA, 6 Gb/s, 7.68 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 0.5 DWPD (Drive Writes Per Day for 5 years) SSD SATA, 6 Gb/s, 3.84 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1.0 DWPD (Drive Writes Per Day for 5 years) SSD SATA, 6 Gb/s, 3.84 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years) SSD SATA, 6 Gb/s, 1.92 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 0.9 DWPD (Drive Writes Per Day for 5 years) SSD SATA, 6 Gb/s, 1.92 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (drive writes per day for 5 years) SSD M.2 SATA, 6 Gb/s, 480 GB, non hot plug, enterprise, 1.4 DWPD (Drive Writes Per Day for 5 years) SSD M.2 SATA, 6 Gb/s, 240 GB, non hot plug, enterprise, 1.4 DWPD (Drive Writes Per Day for 5 years) SSD M.2 SATA, 6 Gb/s, 240 GB, non hot plug, enterprise

Solid-State-Drive	SSD SAS, 12 Gb/s, 960 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 800 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years), SED
	SSD SAS, 12 Gb/s, 800 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 800 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 480 GB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 400 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years), SED
	SSD SAS, 12 Gb/s, 400 GB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 400 GB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 3.84 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 3.2 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 2.3 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 1.92 TB, Read-Intensive, hot-plug, 2.5-inch, enterprise, 1 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 1.6 TB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years), SED
	SSD SAS, 12 Gb/s, 1.6 TB, Write-Intensive, hot-plug, 2.5-inch, enterprise, 10 DWPD (Drive Writes Per Day for 5 years)
	SSD SAS, 12 Gb/s, 1.6 TB, Mixed-use, hot-plug, 2.5-inch, enterprise, 3 DWPD (Drive Writes Per Day for 5 years)
	PCIe SSD & SATA DOM SSD
PCIe-SSD SFF, 6.4 TB, Mixed-use, hot-plug, 2.5-inch, Flash drive, 3.2 DWPD (Drive Writes Per Day for 5 years)	
PCIe-SSD SFF, 6.4 TB, Mixed-use, hot-plug, 2.5-inch, Flash drive, 3.0 DWPD (Drive Writes Per Day for 5 years)	
PCIe-SSD SFF, 4 TB, Read-Intensive, hot-plug, 2.5-inch, Flash drive, 0.6 DWPD (Drive Writes Per Day for 5 years)	
PCIe-SSD SFF, 3.2 TB, Mixed-use, hot-plug, 2.5-inch, Flash drive, 3.1 DWPD (Drive Writes Per Day for 5 years)	
PCIe-SSD SFF, 3.2 TB, Mixed-use, hot-plug, 2.5-inch, Flash drive, 3.0 DWPD (Drive Writes Per Day for 5 years)	
PCIe-SSD SFF, 2 TB, Read-Intensive, hot-plug, 2.5-inch, Flash drive, 0.6 DWPD (Drive Writes Per Day for 5 years)	
PCIe-SSD SFF, 1.6 TB, Mixed-use, hot-plug, 2.5-inch, Flash drive, 3.0 DWPD (Drive Writes Per Day for 5 years)	
PCIe-SSD SFF, 1 TB, Read-Intensive, hot-plug, 2.5-inch, Flash drive, 1 DWPD (Drive Writes Per Day for 5 years)	
PCIe-SSD AIC, 750 GB, Write-Intensive, HHHL, Flash drive, 30 DWPD (Drive Writes Per Day for 5 years)	
PCIe-SSD AIC, 375 GB, Write-Intensive, HHHL, Flash drive, 30 DWPD (Drive Writes Per Day for 5 years)	
Dual microSD 64GB Enterprise	
SCSI / SAS Controller	LSI PSAS CP400e LP SAS Ctrl. 12 Gbit/s 8 ports ext. PCIe 3.0 x8
	Fujitsu PSAS CP400i SAS Ctrl. 12 Gbit/s 8 ports int. PCIe 3.0 x8
	Fujitsu PSAS CP400e FH SAS Ctrl. 12 Gbit/s 8 ports ext. PCIe 3.0 x8
RAID Controller	Fujitsu PRAID EP580i LP, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, NVMe-PCIe 8 Gbit/s, 8 Gbit/s 16 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 8 GB, Optional FBU based on LSI SAS3516
	Fujitsu PRAID EP540i LP, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, NVMe-PCIe 8 Gbit/s, 8 Gbit/s 16 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 4 GB, Optional FBU based on LSI SAS3516
	Fujitsu PRAID EP540e LP, RAID 5/6 Ctrl., SAS 12 Gbit/s, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 4 GB, Optional FBU based on LSI SAS3516
	Fujitsu PRAID EP540e FH, RAID 5/6 Ctrl., SAS 12 Gbit/s, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 4 GB, Optional FBU based on LSI SAS3516
	Fujitsu PRAID EP420i, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108
	Fujitsu PRAID EP420i for SafeStore, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 2 GB, Optional FBU based on LSI SAS3108
	Fujitsu PRAID EP400i, RAID 5/6 Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU based on LSI SAS3108
	Fujitsu PRAID CP400i, RAID Ctrl., SAS/SATA 12 Gbit/s, 8 ports int. RAID level: 0, 1, 1E, 10, 5, 50, No FBU support

Fibre Channel controller	Fibre Channel Host Bus Adapter 1 x 32 Gbit/s Cavium QLE2740 MMF LC-style Fibre Channel Host Bus Adapter 2 x 32 Gbit/s Cavium QLE2742 MMF LC-style Fibre Channel Host Bus Adapter 1 x 32 Gbit/s Emulex LPe32000-M6-F MMF LC-style Fibre Channel Host Bus Adapter 2 x 32 Gbit/s Emulex LPe32002-M6-F MMF LC-style Fibre Channel Host Bus Adapter 1 x 16 Gbit/s Qlogic QLE2690 LC-style Fibre Channel Host Bus Adapter 2 x 16 Gbit/s Qlogic QLE2692 LC-style Fibre Channel Host Bus Adapter 1 x 16 Gbit/s Emulex LPe31000-M6-F MMF LC-style Fibre Channel Host Bus Adapter 2 x 16 Gbit/s Emulex LPe31002-M6-F MMF LC-style
Communication, Network	Converged Network Adapter 2 x 10 Gbit/s / 25 Gbit/s PCIe 3.0 x8 SFP28 (Cavium) Converged Network Adapter 2 x 10 Gbit/s PCIe 3.0 x8 SFP+ (Emulex) Ethernet Ctrl. 1 x 100 Gbit/s PCIe 3.0 x16 QSFP28 (Cavium) Ethernet Ctrl. 1 x 100 Gbit/s PCIe 3.0 x16 QSFP28 (Mellanox) Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 (Cavium) Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 (Intel®) Ethernet Ctrl. 2 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 SFP+ (Cavium) Ethernet Ctrl. 2 x 10 Gbit/s / 25 Gbit/s PCIe 3.0 x8 SFP28 (Cavium) Ethernet Ctrl. 2 x 10 Gbit/s / 25 Gbit/s PCIe 3.0 x8 SFP28 (Intel®) Ethernet Ctrl. 2 x 10 Gbit/s / 25 Gbit/s PCIe 3.0 x8 SFP28 (Mellanox) Ethernet Ctrl. 2 x 10 Gbit/s PCIe 3.0 x8 SFP+ (Intel®) Ethernet Ctrl. 2 x 40 Gbit/s PCIe 3.0 x16 QSFP (Mellanox) Ethernet Ctrl. 4 x 10 Gbit/s ; 1 Gbit/s PCIe 3.0 x8 RJ45 (Intel®) Ethernet Ctrl. 4 x 10 Gbit/s PCIe 3.0 x8 SFP+ (Intel®) Interface modul for Dynamic LoM 2 x 10 Gbit/s RJ45 (Intel®) Interface modul for Dynamic LoM 2 x 10 Gbit/s SFP+ (Intel®) Interface modul for Dynamic LoM 4 x 10 Gbit/s SFP+ (Intel®) Interface modul for Dynamic LoM 4 x 1 Gbit/s RJ45 (Intel®) MPO x 40 Gbit/s () Omni Path 1 x PCIe 3.0 x16 (Intel®)
Rack infrastructure	Rackmount kit full extraction (820mm), tool less mounting, length variable 559-914mm Rack Mount Kit Cable Management for 19-inch DataCenter / PRIMECENTER Racks Cable Arm 2U for PRIMECENTER- and 3rd-party racks
Warranty	
Warranty period	3 years
Warranty type	Onsite warranty
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM
Product Support Services - the perfect extension	
Support Pack Options	Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time (depending on country) 24x7, 4h Onsite Response Time (depending on country)
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life
Service Weblink	http://www.fujitsu.com/emeia/products/product-support-services/

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In addition to FUJITSU Server PRIMERGY RX4770 M5, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

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More information

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