# INTRODUCING EFFICIENT PERFORMANCE IN A SMALL FOOTPRINT

## LENOVO® THINKSERVERT IRD20



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# **TOP REASONS TO OWN**

- HIGH PERFORMANCE IN 1U FORM-FACTOR
- ENTERPRISE CLASS FEATURES
- VIRTUALIZATION READY
- GREEN ENERGY SAVINGS

The brand new ThinkServer RD210 Rack Server provides first-class hardware with easier software tools and world-class services. Combining high performance in a small factor, the RD210 is engineered to deliver the ultimate server experience to small and mid-size businesses.

## EFFICIENT PERFORMANCE IN A SMALL FOOTPRINT

Every RD210 gives customers access to the latest industry technology in a dense 1U rack design.

- Latest industry technology using Intel® Xeon® 5500 series processors
- Dual Processor power in a 1U footprint
- Expandable memory up to 16 slots and 6 HS 2.5" SAS/SATA HDD bays

## **ENTERPRISE CLASS FEATURES**

Lenovo's new RD210 is the smart choice for businesses looking for maximum performance and reliability combined with low cost of ownership.

### THOUGHTFULLY DESIGNED

- Tool-less serviceability makes managing your server quick and painless
- Easy LED lets you monitor your server without opening it
- Integrated Management Module provides always-on management

### **ENGINEERED FOR MAXIMUM UPTIME**

- Built in Predictive Failure Analysis warns you about potential problems before they occur
- Every RD210 comes with integrated RAID giving you peace of mind that your data is protected
- Redundant power and cooling ensures that your servers stay up and running even if a component should have a problem

### LOW COST OF OWNERSHIP

- Lenovo's suite of Easy tools makes setting up and managing your server easier than ever
- Virtualization Ready and Green features allows you to save on your power bill without sacrificing performance

## **VIRTUALIZATION READY**

Lenovo's new ThinkServer provides an ideal virtualization platform. Virtualization technologies reduce server footprint and total cost of ownership by consolidating legacy servers on one platform. The RD210 makes the transition to a virtual environment seamless by:

- Providing an onboard connector for embedded hypervisor standard with every RD210
- Supporting industry leading virtualization solutions from Microsoft<sup>®</sup>, Novell<sup>®</sup>, VMWare<sup>®</sup>, and Red Hat<sup>®</sup>
- Combining Intel<sup>®</sup> virtualization technologies (VT-x, VT-d) with up to 16 Advanced-ECC memory DIMMs, and up to 4 TOE enabled gigabit ethernet ports

## **GREEN ENERGY SAVINGS**

Lenovo's new ThinkServers are the greenest yet with full ENERGY STAR® for servers 1.0 compliance. ENERGY STAR® qualified products are 30% more energy efficient than their counterparts which can lead to \$500 - \$1,500 in cost savings per year! Our new power supplies are over 92% efficient; meaning more of the energy you're paying for is translated into usable power.

Lenovo is an active participant in the world standards organizations. In addition to ENERGY STAR® certification all ThinkServers are RoHS certified. Lenovo is also a participant in the Climate Savers program.

To further help you reduce your power footprint, ThinkServers provide several low power options – including low-wattage processors, low-power memory options, and small form factor hard drives.



ThinkServer<sup>™</sup> Ideas Easy to Use Easy to Install Easy to Expand Easy to Maintain



# THOUGHTFULLY DESIGNED FOR SPACE CONSCIOUS BUSINESSES ALLOWING YOU TO FOCUS ON YOUR GROWING BUSINESS

# LENOVO® THINKSERVERT RD20



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In today's busy corporate environment, IT departments are looking for ways to make installing and managing their server environments efficient and cost effective without sacrificing performance. Lenovo had these needs in mind when it created the new RD210. Based on the latest Intel<sup>®</sup> Xeon<sup>®</sup> processors with a suite of intuitive software and thoughtfully designed services, our new offering is targeted at customers who need:

- An efficient platform to run high performance mission critical applications including database, email, virtualization, and line of business
- High performance computing in a durable, slim-form factor featuring the latest industry technology
- Built-in data protection standard on every model ensuring that hard drive failure doesn't result in data loss
- Integrated advanced management and remote administration capabilities provide health monitoring and control of your server from anywhere, anytime

# EASIER TO USE SERVER MANAGEMENT

The ThinkServer RD210 comes standard with Integrated Management Module (IMM) along with a suite of software tools making it easy to install and manage your server. Our latest software tools feature several usability enhancements.

### **INTEGRATED MANAGEMENT MODULE (IMM)**

- Gives you complete around-the-clock management and remote access from an easy web interface
- Perform server management and health check functions remotely independent of the status of the server
- IMM Premium (available on select models)
  - Remote media, which enables mounting of DVD drive, USB flash drive, or disk image to a server
  - Operating system failure screen capture and display through the Web interface
  - Full remote control (video,mouse,keyboard) of your server from any location

### **EASY STARTUP**

- Complete hardware provisioning in a wizard format takes the guesswork out of driver installation
- Built in RAID configuration ensures your data is protected from the start
- An enhanced list of operating system support ensures you always have access to the latest software

### **EASY MANAGE**

- Complete multi-server management accessible from a single console making it easy to check the health of your servers from anywhere
- Built in right-click menu option takes you right to IMM
- Setup custom alerts so you're always watching exactly what's important to you

## **FIRST-CLASS SERVICE AND SUPPORT**

Lenovo provides complete after sale support with a complementary 90 day trial of ThinkPlus™ Priority Support. Delivered through our reliable and extensive network of business partners, this offer provides customers with peace of mind during the most critical time of server ownership.

- ThinkPlus Productivity provides onsite hardware installation, online training, and tools to improve server performance
- ThinkPlus Priority Support offers expert IT support in a consolidated support package
- ThinkPlus Warranty provides base warranty support



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# LENOVO<sup>®</sup> THINKSERVER<sup>™</sup> RD210 SPECIFICATIONS AND SERVICES



#### Warranty

1/1 and 3/3 Onsite

#### Form Factor

• 1U 2P Rack

#### **Core Chipset**

• Intel<sup>®</sup> 5520 chipset

#### Processor

• Intel® Xeon® 5500 Series Processors

#### Model Name

• RD210

#### Memory

- 1GB, 2GB or 4GB Advanced ECC Memory DDR3 R-DIMMs
- 16 Memory Slots up to 128 Max Memory

#### Storage

• RAID 0, 1, 1E or RAID 0, 1, 1E, 5, 6, 10, 50

### • 6 x 2.5" HS SAS/SATA

Multi-Burner DVD Drive

#### Connectivity

 Integrated Dual Gigabit Ethernet with TCIP/IP Offload Engine (TOE) (Optional 2 additional integrated ports)

#### Management

- Built in IMM
- EasyManage
- Optional IMM Premium
- Onboard virtualization connector

#### **PCI Slots**

- 2 PCIe Gen 2 slots
- 1 x 16 full-height, half-length
  1 x 16 low profile

#### Ports

- 2 video ports (1 front, 1 rear)
- 5 USB ports (2 front, 2 rear, 1 internal)

#### **Diagnostics**

Easy LED Panel

#### Cooling

Hot-Swap Redundant fans

### Power Supply

675W Redundant capable

#### Software

- Windows Server® 2008 (Standard and Enterprise)
- Windows<sup>®</sup> Small Business Server 2008 (Premium and Standard)
- Windows<sup>®</sup> Essential Business Server 2008 (Premium and Standard)
- Windows<sup>®</sup> Small Business Server 2003 (Premium and Standard)
- Novell® SUSE® Linux Enterprise Server (SLES) 10 32/64 bit (Novell® is Lenovo's Preferred Linux® Provider for ThinkServer)

#### **Virtualization Solutions**

- Windows Server<sup>®</sup> 2008 with Hyper-V Standard and Enterprise
- Novell® SUSE® Linux Enterprise Server (SLES) 10 with Xen Hypervisor
- VMWare® ESX and ESXi 3.5
- Red Hat® Enterprise Linux 5.x

A-La-Carte ThinkPlus™ Services					
Online Data Backup	Online Training				
Provides a secure, online location to backup your valuable business data. 25GB, 50GB, and 100GB options	Learn the basics on components, diagnostics, trouble- shooting, and managing your server				
Onsite Hardware Installation	Available in English, French, Spanish, German, Italian, Japanese, and Korean				
Provides onsite installation of hardware by trained technicians					

ThinkPlus <sup>™</sup> Bundled Service Offerings						
ThinkPlus™ Warranty Base Warranty Support	ThinkPlus™ Priority Support Consolidated Support Package	ThinkPlus <sup>™</sup> Productivity No Hassle Up-and-Running Bundle				
Warranty Extension	24x7 Hardware and Software Phone Support	Onsite Hardware Installation				
Optional 4-Hour Onsite Service Response (9x5)	Priority Routing	Online Training				
	Advanced Level Technicians	Priority Support				
	Software Installation and Usage Support (Phone-Based)					
	Next-Business Day (9x5) Onsite Service					
	Optional 4-Hour (24x7) Onsite Service Response					
	Optional Hardware Drive Retention					



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# LENOVO® THINKSERVER™ RD210 ACCESSORIES AND OPTIONS

DDR3 RDIMM Memory						
Faster Performance	67Y0014	ThinkServer 1GB PC3-10600 DDR3 1333 MHz RDIMM				
Low Power Consumption	67Y0015	ThinkServer 2GB PC3-10600 DDR3 1333 MHz RDIMM*				
<ul><li>Advanced ECC</li><li>Memory Mirroring</li></ul>	67Y0016	ThinkServer 4GB PC3-10600 DDR3 1333 MHz RDIMM*				
		* Advanced ECC				
Intel® Xeon® 5500 Series Processors						
Simultaneous	67Y0004	Intel® Xeon® E5502 Processor (1.86 GHz) Option Kit				
Multi-Threading	67Y0005	Intel® Xeon® E5506 Processor (2.13GHz) Option Kit				
Integrated Memory	67Y0006	Intel® Xeon® E5520 Processor (2.26GHz) Option Kit				
Controller • Intel <sup>®</sup> QuickPath	67Y0007	Intel® Xeon® E5504 Processor (2.00GHz) Option Kit				
	67Y0096	Intel® Xeon® E5540 Processor (2.53GHz) Option Kit				

2.5" SAS and SATA HDDs					
<ul> <li>Slim-Form Factor 2.5"</li> <li>6.0 Gb/s SAS Interface</li> <li>Low Power Consumption</li> <li>Performance (10K/15K)</li> <li>Hot-Swap Carriages</li> </ul>	SAS				
	67Y0115	ThinkServer 73GB 6.0 Gb/s 15K 2.5" SAS SFF HS			
	67Y0116	ThinkServer 146GB 6.0 Gb/s 10K 2.5" SAS SFF HS			
	67Y0117	ThinkServer 146GB 6.0 Gb/s 15K 2.5" SAS SFF HS			
	67Y0118	ThinkServer 300GB 6.0 Gb/s 10K 2.5" SAS SFF HS			
	SATA				
	67Y0002	ThinkServer 300GB 3.0 Gb/s 10K 2.5" SATA SFF HS			
ThinkServer Accessories					
Keyboards	Keyboards/Mice				
Mouse	31P9490	ThinkPad Travel UltraNav USB Keyboard – US English			
Monitors	73P5220	Lenovo Preferred Pro Keyboard USB – US English			
		Lenovo i reicheu i lo Reyboard 000 00 Englion			
	06P4069	Lenovo Optical Mouse			
	06P4069 Monitors	, ,			
-		, ,			
	Monitors	Lenovo Optical Mouse			

		ThinkServer Ready Options – 3rd	l party options for a complete so	lution	
ThinkServer Ready: Gigabit Ethernet I/O	39Y6066	NetXtreme II 1000 Express Single Port Ethernet Adapter	ThinkServer Ready: HBA	8Gb Interf	ace
	42C1780	NetXtreme II BaseT Express Dual Port Ethernet Adapter	Controller Options	42D0485	Emulex 8Gb FC Single-Port PCle HBA
	39Y6126	PRO/1000 PT Dual Port Server Adapter by Intel®		42D0484	Emulex 8Gb FC Dual-Port PCle HBA
	39Y6136	PRO/1000 PT Quad Port Server Adapter by Intel®		42D0501	QLogic 8Gb FC Single-Port PCIe HBA
ThinkServer Ready: Tape	44E8895	IBM® LTO Half-High Generation 4 SAS Tape Drive		42D0510	Qlogic 8Gb FC Dual-Port PCle HBA
Backup	43W8480	IBM® DDS Generation 5 SATA Tape Drive		46M6049	Brocade 8Gb FC Single-Port PCIe HBA
-	39M5636	IBM® DDS Generation 6 USB Tape Drive		46M6050	Brocade 8Gb FC Dual-Port PCIe HBA
	IBM® RDX External USB Bundles			4Gb Interface	
	362516X	160GB	-	39R6525	QLogic 4Gb FC Single-Port PCIe HBA
	362532X	320GB		39R6527	QLogic 4Gb FC Dual-Port PCle HBA
	362550X	500GB		42C2069	Emulex 4Gbps FC Single-Port PCle HBA
		Note: RDX Bundles include the following: Cartridge, Dock, & USB cables		42C2071	Emulex 4Gbps FC Dual-Port PCle HBA
ThinkServer Ready:	43W4296	IBM® ServeRAID MR10i SAS/SATA Controller	ThinkServer Ready: Uninterruptible Power Supplies	UPS	
RAID and HDD Controller	44E8826	IBM® ServeRAID MR10i Li-Ion Battery		21301RX	IBM® UPS 3000 LV (Low Voltage)
	44E8825	IBM® ServeRAID MR10M SAS/SATA with Remote Battery Kit		21302RX	IBM® UPS 3000 HV (High Voltage)
	44E8689	IBM® ServeRAID BR10i SAS/SATA Controller		21302JX	IBM® UPS 3000 HV (Japan High Voltage)
	44E8695	IBM® ServeRAID MR10is VAULT SAS/SATA Controller	ThinkServer Ready: Server Power and Cables	Redundan	t Power
	44E8700	IBM® ServeRAID 3Gb SAS HBA Controller v2		46M1075	675W Redundant Power Supply (Internal)
ThinkServer Ready:	4007500 Vietual Madia Vau		Rack Extension Power Cables		
Systems Management	4007 020	4007520 VII tudi Metula Ney		39Y7932	4.3m, 10A/100-250V, C13 to IEC 320-C14
ThinkServer Ready: Systems Management				46M1075 Rack Exte	675W Redundant Power Supply (Internal) nsion Power Cables

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(4)

Visit lenovo.com/safecomputing periodically for the latest information on safe and effective computing.



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