

Unisys ClearPath Plus Libra Model 185 Server.

The Libra Model 185 is the most powerful MCP based server ever built. This high-end system is the Modern Mainframe that delivers all of the traditional mainframe attributes—plus valuable new business characteristics such as diverse computing workloads, flexible buying models, popular software standards, powerful integration middleware, autonomic systems management, and excellent productivity economics.

THE UNISYS CLEARPATH PLUS LIBRA FAMILY OF SERVERS.



The ClearPath Plus Libra Model 185 is the newest member in the family of ClearPath Plus Libra 180 Servers, and introduces the new high-performance Unisys CMOS processors and I/O subsystems. These new features are also available for existing Libra Model 180 clients. As the successor to the highly successful ClearPath NX6800 Series, the Libra Model 180 Series delivers the latest state-of-the-art software and a platform based on the Unisys Cellular MultiProcessing (CMP) architecture.

The ClearPath Plus Libra Model 185 server features a modular design that supports a new high level of infrastructure flexibility for the agile enterprise, including a choice of hardware technologies, operating environments and applications, growth options, integration software, and even buying models. These high-end servers offer extraordinary power and capacity with new high-performance Unisys CMOS processor technology

and a new and highly advanced input/output subsystem. The overall system is designed to maximize the return on your current IT investment and give you the agility to quickly and effectively respond to new challenges and business opportunities.

Product highlights.

- ▶ New high-performance Unisys MCP CMOS processors
- ▶ New high-performance I/O
- ▶ Reserve MCP processors
- ▶ Increased memory
- ▶ New generation Intel® processors
- ▶ Up to 8 MCP CMOS-based native partitions
- ▶ 16-processor-image capability
- ▶ Performance redistribution

➤ **Systems Integration.**

➤ **Outsourcing.**

➤ **Infrastructure.**

➤ **Server Technology.**

➤ **Consulting.**

UNISYS

Imagine it. Done.

New levels of flexibility.

The Libra Model 185 server delivers an operating environment that is flexible, powerful, and compatible with your existing MCP-based solutions. Unisys has revolutionized the mainframe by combining a business-critical environment with open system capabilities. ClearPath MCP applications and data can be integrated with external heterogeneous servers, databases, and applications using virtually any of the industry's most popular technologies.

The Libra Model 185 server delivers many new features for the agile corporation:

- ▶ Improved growth path through horizontal and vertical scalability.
- ▶ Expanded application offerings through multiple operating system environments. The Libra Model 185 platform supports up to eight independent partitions concurrently running Unisys MCP, Virtual Machine for ClearPath MCP (MCPvm), Microsoft® Windows® 2000 Advanced Server, Windows® 2000 Datacenter Server, Windows® Server 2003, Enterprise Edition, Windows® Server 2003, Datacenter Edition, and/or SCO® UnixWare® operating systems—making it possible to choose the environments that best meet your specific processing requirements. You can dedicate these partitions to production, development, testing, disaster recovery, CRM and ERP solutions, the Enterprise Application Environment, and many others.
- ▶ The wide choice of concurrently running operating systems enables you to consolidate multiple servers on a single platform: NX, A Series, Windows, and UnixWare environments. Consolidation brings centralized control of multiple servers with potential savings in both system and operational costs.

- ▶ Capacity on Demand helps you better manage your changing capacity requirements. Designed to revolutionize the way you buy ClearPath information processing power, Capacity on Demand delivers new agility for managing your dynamically changing workloads, including unpredictable spikes in demand and emergency/disaster recovery situations. Several different buying options are offered for the most flexibility in your server operations. Temporary incremental system capacity is key to supporting dedicated and shared disaster recovery systems with remote secondary systems typically used for development. You pay only for the incremental capacity for a period of 30 days—an option that enables you to handle major unplanned operational disruptions. Shorter periods can be addressed with a 12-day emergency recovery option. And a temporary workload option gives you daily incremental capacity for 5 to 365 days to meet any unplanned peak load demand.
- ▶ Performance redistribution allows you to distribute processing performance across multiple partitions within your system at any time. Performance continuity is maintained in a dual-domain environment where you can utilize the maximum contracted system performance in one domain when the other domain is unavailable for processing. It also allows you to distribute performance over processors within a partition, accommodating applications written for single- and multi-processor configurations.

▶ Many Unisys ClearPath Plus clients use general-purpose production systems and independent development systems. One attraction of the Libra Model 185 server is the ability to consolidate production and development systems on one platform thus taking advantage of specially priced development workloads. This not only reduces the cost of your overall system, but it also enables you to operate the environment more efficiently.

▶ You can run your ClearPath MCP applications on both Unisys MCP CMOS processors and Intel processors in the new Libra 185 server. If you want to run an MCP application on both types of processors, you don't have to change or recompile the program. The Virtual Machine for ClearPath Plus MCP software does everything by isolating your application from the different processor architectures.

▶ Unisys Server Sentinel for ClearPath Plus servers gives you a single point of access to your Windows and MCP partitions; centralized, Web-based, GUI access to all of its management tools; and an "at-a-glance" view of the system's overall health. Server Sentinel also provides self-healing capabilities for the Windows-based partitions of your ClearPath Plus MCP servers and integrates with Unisys Application Sentinel and NetIQ AppManager software for application management. For the enterprise management layer of your data center, Server Sentinel provides an integration path to enterprise management systems such as Tivoli NetView, HP OpenView, BMC Patrol, and CA Unicenter for managing your networked hardware and software. Server Sentinel includes functionality previously provided by the System Management Center product for ClearPath MCP systems.



System attributes.

The ClearPath Plus Libra Model 185 server offers exceptional business value based on improved mainframe hardware and software attributes:

- ▶ High volume, mission critical transaction processing
- ▶ Unparalleled scalability, particularly in Symmetrical MultiProcessing (SMP) mode
- ▶ Unisys Server Sentinel for simplified systems management
- ▶ High performance interoperability
- ▶ Multiple operating system environments
- ▶ Capacity on Demand options
- ▶ Performance redistribution
- ▶ Consolidation options
- ▶ Powerful middleware for application, Internet, message, and data integration in heterogeneous environments using popular industry standards
- ▶ Application access via Web, PDA, mobile, etc.
- ▶ Extensive MCP software portfolio with true mainframe attributes
- ▶ A suite of mainframe application development tools
- ▶ Low-cost development environments

Unisys ClearPath Plus Libra

Model 185 Server: System specifications.

Maximum processors.

- ▶ Up to 32 processors configured in 4-processor modules
- ▶ Up to 32 Unisys MCP CMOS processors
- ▶ Up to 24 Intel® processors concurrently running Virtual Machine for ClearPath MCP (MCPvm), Microsoft® Windows® 2000 Advanced Server and Datacenter Server, Microsoft® Windows® Server 2003, Enterprise Edition and Datacenter Edition, and/or SCO® UnixWare®

Processor types.

- ▶ Unisys MCP CMOS processors
- ▶ Intel® Xeon™ processor MP
 - 1.5 GHz with 1 MB on-die cache OR
 - 2 GHz with 2 MB on-die cache

Performance.

- ▶ 40 – 1,910 MIPS per MCP partition (970 – 46,400 RPMs)
- ▶ 21 – 185 MIPS¹ per MCPvm partition (500 – 4,500 RPMs)

Memory.

- ▶ 46 GB of MCP memory maximum per system (requires 64 GB physical memory)
- ▶ 3 GB of MCP memory minimum per system (requires 4 GB physical memory)
- ▶ 24 GB of MCP memory maximum per partition (requires 32 GB physical memory)
- ▶ 3 GB of MCP memory minimum per partition (requires 4 GB physical memory)

Domains.

- ▶ Two (2) power domains

Partitions.

- ▶ A maximum of eight (8) partitions (in 4-CPU increments)
- ▶ Up to eight (8) MCP partitions (in Unisys MCP CMOS 4-CPU increments)
- ▶ A single MCP partition with up to eight (8) MCP processors
- ▶ Up to six (6) Windows, Virtual Machine for ClearPath MCP, and/or UnixWare partitions (in Intel 4-CPU increments)
- ▶ A single Microsoft Windows partition of up to 24 Intel processors

I/O slots.

- ▶ PCI: Up to 96 slots available including 66 MHz and 64-bit data addressing capabilities.

1. MIPS values are based on an IDC analysis

Architecture.

- ▶ Unisys Cellular MultiProcessing (CMP)
- Four-way, non-blocking, crossbar inter-connect
- SMP-based programming model (applications run without change)

Operating environments supported.

- ▶ ClearPath MCP AND
- ▶ Virtual Machine for ClearPath MCP (MCPvm)
- ▶ Microsoft® Windows® 2000 Advanced Server
- ▶ Microsoft® Windows® 2000 Datacenter Server
- ▶ Microsoft® Windows® Server 2003, Enterprise Edition
- ▶ Microsoft® Windows® Server 2003, Datacenter Edition
- ▶ SCO® UnixWare®

Cooling method.

- ▶ Up to six cabinet impellers (N+1)

Access area.

- ▶ Front and rear, 42" full-width

Weight and dimensions.

- ▶ See Table 1

Power sectors.

- ▶ Up to two (2) per cabinet
- ▶ 30A, 50/60 Hz, single phase, 200-240 VAC

Power total.

- ▶ 11.3 KW

Thermal.

- ▶ 38,580 BTU/hr

Noise level.

- ▶ 7.5 Bels re: 1pW

Shock.

- ▶ Operating: 3.0g, 15ms
- ▶ Non-operating: 8.0g, 15ms

Unisys ClearPath Plus Libra**Model 185 Servers:** Table 1 Weights and Dimensions.

Style Number	Description	Weight pounds (kilograms)	Width inches (meters)	Depth inches (meters)	Height inches (meters)
CS780111-S04	Single-domain, single-partition with 4 processors and 4 GB of memory	1,434 (650.3)	71 (1.8)	47 (1.2)	69 (1.8)
CS780121-S08	Single-domain, dual-partition with 8 processors and 8 GB of memory	1,911 (866.7)	71 (1.8)	47 (1.2)	69 (1.8)
CS780121-D08	Dual-domain, dual-partition with 8 processors and 8 GB of memory	2,081 (943.8)	71 (1.8)	47 (1.2)	69 (1.8)
CS780121-D16	Dual-domain, dual-partition with 16 processors and 16 GB of memory	2,281 (1,034.5)	71 (1.8)	47 (1.2)	69 (1.8)
CS361941-AUX	Auxiliary cabinet (optional)	506 (229.5)	22 (0.6)	43 (1.1)	69 (1.8)

Vibration.

- ▶ Operating: .01 in. 5-22Hz; .25 g 22-300Hz
- ▶ Non-operating: .10 in. 5-10Hz; .5g 10-70Hz; .002 in. 70-99Hz; 1.0g 99-300Hz

Temperature.

- ▶ Operating temperature: 13 C to 35 C (55°F to 95°F)
- ▶ Shipping temperature: -40 C to 65 C (-40°F to 149°F)

Relative humidity.

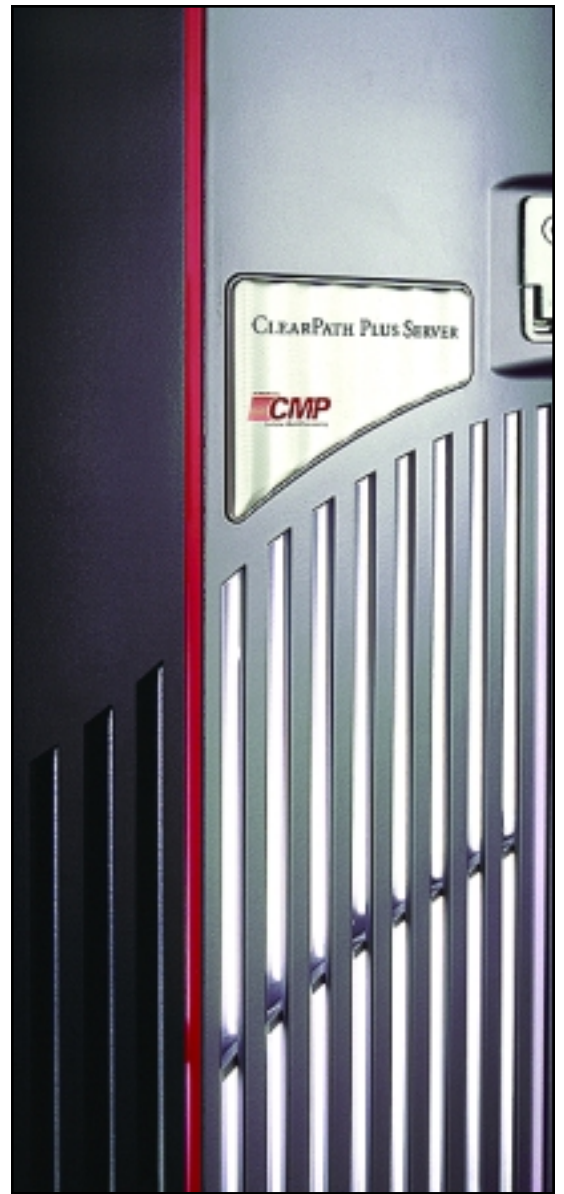
- ▶ Operating: 10-80% (non-condensing)
- ▶ Non-operating: 95% maximum (non-condensing)

**Altitude.**

- ▶ 0-8,000 ft (0 - 2,436 m)

Systems management.

- ▶ Unisys Server Sentinel
- ▶ Dedicated service processor



For more information, please contact your Unisys representative.

**Or call Unisys today at:
1-800-874-8647, ext. 776 (U.S and Canada)
00-1-585-742-6780, ext. 776 (From other countries)**

**You can also contact us by email at:
cic@unisys.com**

**For up-to-date ClearPath Plus Libra Model 185 server information, visit our website at:
www.unisys.com/cp/libra**

**You'll find even more details and documents at our community of ClearPath users at:
www.unisys.com/cp/community**

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www.unisys.com/cp/libra**

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