

## PRIMERGY TX150 Mono-Processor Tower Server



### Optimized for low cost operation

The **PRIMERGY TX150** is the SCSI Entry-model of the PRIMERGY Tower Server line. Features, performance as well as the integration of future oriented technologies makes the mono processor server PRIMERGY TX150 well suitable for small enterprises.

- Powerful Mono Intel® Pentium® 4 processor system with 533 MHz Front Side Bus. The Pentium® 4 variant with 3.06 GHz provides additionally the "Hyper Threading" technology supporting a greater performance bandwidth.
- Up to 4 hot-plug SCSI hard disks with up to 146 Gbyte capacity each and the optional hard disk extension unit extends number of hot-plug SCSI hard disks to 7 (4 + 3)

### Application areas

The PRIMERGY TX150 is a universal mono processor server platform for classical business- respectively industry- and office applications. Specific application areas might include as file and print server, as an intranet or Internet server, as a communications server for gateways, domains, firewalls and as Web server.

### High availability

The onboard 1-channel Ultra320 SCSI controller with hardware RAID on chip offered with the PRIMERGY TX150 increases the system's availability and supports RAID levels 0, 1 and 10. The optional zero-Channel RAID controller adds further RAID functions to the features of the onboard SCSI controller. A hot-plug and redundant power supply is available as further option.

### Server Management

With the IPMI 1.5 compliant onboard server management controller the remote console can be switched over via (working) LAN even if the operating system is no longer available.

The remote management also allows power on and off of the system via LAN. The system delivery includes the proven products of the PRIMERGY ServerView Suite (ServerStart, ServerView).

The PRIMERGY TX150 takes up only 5 height units in a rack with an easy rack conversion due to 90 degree turn-able accessible drives and front panel.

### Further system functionalities

- Up to 4 GB ECC protected DDR SDRAM memory
- Support of internal backup-drives with the onboard SCSI controller
- 2 free accessible drive bays plus CD / DVD / CD-RW and FD drive
- 10/100/1000 Mbit/s Ethernet LAN Controller
- Four LED's for Power/Standby, hard disks activity, system status and identify on the front side. Two LED's for system status and identify on the rear side
- RemoteView, RemoteView Service Board (RSB) and chipDISK as options.

<b>Type</b>	Mono-Processor Tower Server
<b>System board</b>	D1501
Chip set	ServerWorks GC-SL
Processors	Intel® Pentium® 4
Frequencies	2.4 GHz, 2.66 GHz, 2.8 GHz, 3.06 GHz
Front-Side-Bus	533 MHz
Second-Level-Cache	512 Kbyte ECC
<b>Memory</b>	
256 Mbyte up to max. 4 Gbyte, registered ECC PC2100 DDR SDRAM; Organized in 4 banks with 1 slot each for modules 256 Mbyte, 512 Mbyte or 1 Gbyte each	
<b>Flash-EPROM</b>	
Local BIOS update from floppy disk; Remote BIOS update via LAN (Global Flash tool), via modem (optional chipDISK, RemoteView Diagnosis), and via optional RemoteView Service Board (RSB).	
<b>Interfaces</b>	
Serial	2 x RS-232-C (9-pin)
Centronics (parallel)	1 x 25-pin, EPP/ECP compatible
Keyboard, Mouse	2 x PS/2
USB	1 x front, 2 x back
Graphic	1 x VGA (15-pin)
LAN	1 x RJ45
<b>Onboard controller</b>	
IDE	ATA100 (for CD / DVD drives)
SCSI / RAID (Adaptec AIC7901)	1-channel Ultra320 SCSI with RAID level 0, 1, 10 (HostRAID)
RAID option (ZCR PCI card)	RAID level 5, 50 extension for onboard SCSI/RAID controller
LAN (Intel 82540EM)	Ethernet 10/100/1000 Mbit/s
Graphics	ATI Rage128 Ultra 8 Mbyte
Server management	Baseboard Management Controller (BMC), IPMI 1.5 compatible
<b>Hard disk drives</b>	18, 36, 73, 146 Gbyte (hot-plug)
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
<b>I/O Slots:</b> 1x PCI 64-bit/33MHz, short (ZCR support); 3x PCI 64-bit/33MHz, 1x short (5V), 2x long (5V); 1x PCI 32-bit/33MHz; long (RSB support)	
<b>Drive bays</b>	
for hard disk drives	4x 3.5/1-inch, for hot-plug SCSI (in slide-in chassis ) Optional: 3 x 3.5/1-inch hard disk extension unit, occupies 2x 5.25/1.6-inch bays for accessible drives
for accessible drives	3x 5.25/1.6-inch, one bay is occupied by CD or DVD
for floppy disk drive	1x 3.5/1-inch, occupied by FDD
<b>Electrical values</b>	
Power supply	Standard / Redundant hot-plug
Output power	250 W / 1 + 1 x 250 W each
Apparent power	max. 370 VA / max. 370 VA
Effective power	max. 350 W / max. 350 W
Mains current	max. 4.5 A (100 V - 127 V) max. 2.0 A (200 V - 240 V)
Heat dissipation	max. 1200 kJ/h
Rated AC voltage	100 - 127 V, 200 - 240 V
Frequency	50-60 Hz

<b>Temperature/Noise/Dimension/Weight</b>	
Ambient temperature	10°C - 35°C (DIN IEC 721)
Noise pressure	<= 45dB (A) class1 ISO9296
Noise power	<= 6,0 B class1 ISO9296
Dimension of floor-stand (HxWxD)	444 * 205 * 605 mm, incl. all plastics
Dimension rack mount (HxWxD)	221 * 482* 607 mm, incl. front knobs; 5U
Weight	approximately 28 kg (depends on configuration)
<b>Compliance with Norm and Standards</b>	
<b>Product safety</b>	
Global	IEC 60950
Europe	EN 60950
USA	UL 60950 3rd. Ed.
Canada	CAN/CSA-C22.2 No. 60950 3rd. Ed.
<b>Electro magnetic compatibility</b>	
Europe	EN 55 022 class A, EN 55024, EN61000-3-2 / -3
Taiwan	BSMI class A ( CNS13438 )
Japan	VCCI class A
Australia / New Zealand	AS / NZS 3548 class A
USA / Canada	FCC class A
<b>Declaration of conformity</b>	
Europe (CE)	89/336/EEEC (EMC); 72/23/EEC (LVD)
North America	FCC class A
<b>Approvals</b>	
<b>Product safety</b>	
Global	CB
Europe	CE
USA / Canada	CSA <sub>US</sub> / CSA <sub>C</sub>
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.	
<b>Supported operating systems</b>	
Microsoft: Windows 2003 Standard; Web Edition Microsoft: Windows SBS 2003 Standard Edition Microsoft: Windows 2000 Server; SBS Microsoft: Windows NT 4.0 TSE; Server Novell: NetWare 6 int'l; 6.5 Novell: Cluster Services 1.6; iSCSI Cluster Service 1.7 SCO: Open Server 5.0.7; UnixWare 7.1.3 SuSE: LINUX ES-8; LINUX 8.1; LINUX 8.2; LINUX ES-7 Red Hat: LINUX EL2.1; LINUX 8.0; 9.0; IBM: OS/2 Warp Server f.e-Business (restricted configuration)	
For supported controllers (onboard and PCI cards for SCSI, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator.	
<b>Server Management</b>	
Standard	ServerStart, ServerView; PDA, ASR&R
Optional	RemoteView, RemoteView Service Board (RSB), chipDISK

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