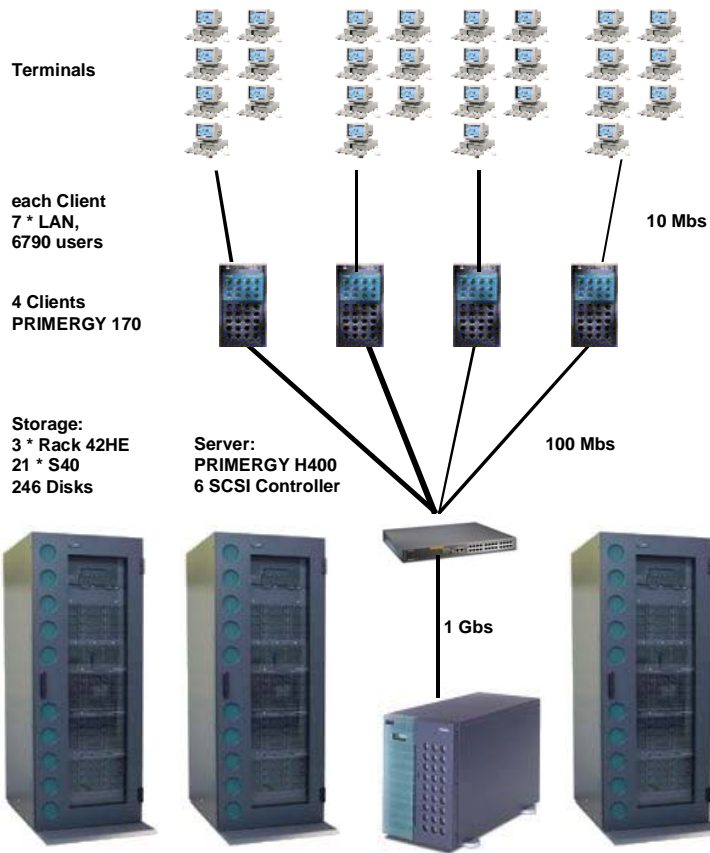


Total System Cost	TPC-C Throughput	Price/Performance	Availability Date
€ 607,361	34,150.87 tpmC	€17.78/tpmC	November 1, 2000
Processors	Database Manager	Operating-System	Other Software
4 Intel Pentium® III Xeon 700 MHz	Microsoft SQL Server 2000 Enterprise Edition	Microsoft Windows 2000 Advanced Server	Windows 2000 Server, IIS 5.0 and COM+
Number of Users			
27,160			



System Components	Qty/Srv. 1 PRIMERGY H400	Qty/Client 4 PRIMERGY 170
Processors	4 Intel Pentium® III Xeon 700 MHz with 2 MB SLC	1 Intel Pentium® III 750 MHz with 256 KB SLC
Memory	8 GB	256 MB
Disk Controller	6 Mylex eXtremeRAID 2000	1 SCSI Controller
Disk Drives	145 9 GB	1 9 GB
	96 18 GB	
	6 36 GB	
Total GB of Storage	1 2,789 GB	1 9 GB

Description	Part Number	Third Party	Unit Price	Qty.	Extended Price	5yr Maint. Price
Brand Pricing						
PRIMERGY H400 Base (1x700MHz 2MB)	SNP:SY-K595V207-A	1	10.980 Euro	1	10.980 Euro	
Pentium III Xeon Processor 700MHZ/2MB	SNP:SY-F2276E702-A	1	6.615 Euro	3	19.845 Euro	
Memory 2 GB SDRAM 100MHZ (4 Mod.)	SNP:SY-F2174E545-A	1	7.680 Euro	4	30.720 Euro	
Gigabit Ethernet PCI 32/64	D:RM6T5-CL18	1	3.107 Euro	1	3.107 Euro	
Tape Drv SLR50 , 25GB	SNP:SY-F1835E2-A	1	1.575 Euro	1	1.575 Euro	
9GB/10K LVD-SCSI, Hot Plug	SNP:SY-F1899E109-A	1	480 Euro	1	480 Euro	
Primergy S40 ES 1 channel	SNP:SY-K538V501-P	1	2.655 Euro	1	2.655 Euro	
S40 3 channels kit	SNP:SY-F2015E3-P	1	414 Euro	1	414 Euro	
36GB/10K, Hot Plug	SNP:SY-F1899E136-P	1	1.643 Euro	6	9.858 Euro	
RAID-Ctrl, PCI, 4-Ch, BBU	SNP:SY-F2190-E128	1	3.150 Euro	6	18.900 Euro	
APC USV 3000VA	SNP:PS-E399L1-P	1	1.598 Euro	1	1.598 Euro	
CD-ROM 40x, Ultra SCSI	SNP:SY-F2086E1-A	1	135 Euro	1	135 Euro	
Power Supply Module 400W (add)	SNP:PS-F234E4-A	1	405 Euro	1	405 Euro	
Tastatur KBPC B Light Basic (D)	S26381-K271-V320	1	29 Euro	1	29 Euro	
Country Pack	SNP:SY-F2195B201-A	1	40 Euro	1	40 Euro	
Monitor 154V	S26361-K605-V150	1	240 Euro	1	240 Euro	
Server Hardware Subtotal				1	100.981 Euro	20.144 Euro
Data Center Rack 42 HE	S26361-K476-V101	1	2.070 Euro	3	6.210 Euro	5.675 Euro
18GB/10K, Hot Plug (+10% spares)	SNP:SY-F1899E118-P	1	840 Euro	106	89.040 Euro	
9GB/10K, Hot Plug (+10% spares)	SNP:SY-F1899E109-P	1	480 Euro	159	76.320 Euro	
Primergy S40 ES 1 channel (+ 10% spares)	SNP:SY-K538V501-P	1	2.655 Euro	22	58.410 Euro	
SCSI Cable UHD-HD 5m (+10% spares)	SNP:SY-F1947L50-A	1	135 Euro	22	2.970 Euro	
Storage Subtotal				1	232.950 Euro	
PRIMERGY 170 GE F, PIII 750, SCSI	SNP:SY-K549V146-A	1	1.463 Euro	4	5.852 Euro	5.400 Euro
Keyboard KBPC	S26381-K271-V320	1	29 Euro	4	116 Euro	
Country Pack	SNP:SY-F1699B401-A	1	40 Euro	4	160 Euro	
Memory 128 MB SDRAM ECC	S26361-F1840E515	1	428 Euro	8	3.424 Euro	
HD 9GB, U2W	SNP:SY-F2069E9-A	1	428 Euro	4	1.712 Euro	
Fast Ethernet 2x 10/100 Duralink64 PCI	SNP:SY-F2217E1-P	1	405 Euro	16	6.480 Euro	
Monitor 154V	S26361-K605-V150	1	240 Euro	4	960 Euro	440 Euro
Client Hardware Subtotal				1	18.704 Euro	
Microsoft Windows 2000 Adv. Server, 25 CAL	C10-00164	1	2.737 Euro	1	2.737 Euro	
MS SQL-Server 2000 Ent.Edit. Per Proc Lic.	810-00845	1	19.718 Euro	4	78.872 Euro	
Server Software Subtotal					81.609 Euro	17.260 Euro
Microsoft Windows 2000 Server, incl. 25 CAL	C11-00313	1	843 Euro	4	3.372 Euro	
Microsoft Visual C++ Professional 6.0	048-00426	1	482 Euro	1	482 Euro	
Client Software Subtotal					3.854 Euro Incl. Above(svr)	
8xTP, 1x Coax 10Mbit Hub	Artk-Nr 354	K&M	2	31 Euro	3758	116.498 Euro
8x10/0100Mbit Switch	DES-3225G	D-Link	3	876 Euro	3	2.628 Euro
Gigabit Uplink (+10% spare)	DES-3251G	D-Link	3	406 Euro	3	1.218 Euro
User Connectivity Subtotal					120.344 Euro	
Total					558.442 Euro	48.919 Euro

Five-Year Cost of Ownership 607.361 Euro
 tpmC Rating 34.150.87
 Euro / tpmC 17,78 Euro

1=Fujitsu-Siemens, 2=K&M Elektronik, 3=D-Link

Prices used in TPC benchmarks reflect the actual prices a customer would pay for a one-time purchase of the stated components. Individually negotiated discounts are not permitted. Special prices based on assumptions about past or future purchases are not permitted. All discounts reflect standard pricing policies for the listed components. For complete details, see the pricing section of the TPC benchmark pricing specifications. If you find that the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.

Five-Year Cost of Ownership: €607,361
 tpmC Rating: 34,150.87
 € / tpmC: 17.78

Note: The benchmark results and test methodology were audited by Bradley J. Askins of InfoSizing

Numerical Quantities Summary

MQTh, computed Maximum Qualified Throughput		34,150.87 tpmC	
% throughput difference, reported & reproducibility runs 0.16 %			
Response Times (in seconds)	90th percentile	Average	Maximum
- New-Order	0.40	0.28	6.86
- Payment	0.31	0.20	2.00
- Order-Status	0.34	0.22	8.82
- Delivery (interactive portion)	0.12	0.11	0.79
- Delivery (deferred portion)	0.35	0.20	0.86
- Stock-Level	1.48	1.02	2.81
- Menu	0.12	0.11	0.90
Transaction Mix, in percent of total transactions			
- New-Order			44.83 %
- Payment			43.00 %
- Order-Status			4.06 %
- Delivery			4.05 %
- Stock-Level			4.06 %
Emulation Delay (in seconds)		Response Time	Menu
- New-Order		0.1	0.1
- Payment		0.1	0.1
- Order-Status		0.1	0.1
- Delivery (interactive)		0.1	0.1
- Stock-Level		0.1	0.1
Keying/Think Times (in seconds)	Minimum	Average	Maximum
- New-Order	18.00/0.00	18.01/12.05	18.04/120.50
- Payment	3.00/0.00	3.01/12.04	3.04/120.50
- Order-Status	2.00/0.00	2.01/10.01	2.03/100.50
- Delivery (interactive)	2.00/0.00	2.01/ 5.09	2.03/ 50.49
- Stock-Level	2.00/0.00	2.01/ 5.04	2.03/ 50.50
Test Duration and Checkpointing			
- Ramp-up time		27 minutes	
- Measurement interval		30 minutes	
- Number of checkpoints		1	
- Checkpoint interval		30 minutes	
- Transactions during measurement interval (all types)		2,378,050	