
		<b>PRIMERGY RX300 S8</b>		<b>TPC-E 1.12.0</b> <b>TPC Pricing 1.7.0</b>
				Report Date September 10, 2013
TPC-E Throughput <b>2,472.58 tpsE</b>	Price/Performance <b>\$ 135.14 USD per tpsE</b>	Availability Date <b>September 10, 2013</b>	Total System Cost <b>\$ 334,140 USD</b>	
<b>Database Server Configuration</b>				
Operating System <b>Microsoft Windows Server 2012 Standard Edition</b>	Database Manager <b>Microsoft SQL Server 2012 Enterprise Edition SP1</b>	Processors/Cores/Threads <b>2/24/48</b>	Memory <b>512 GB</b>	
<b>SUT</b>				
		<b>Tier A</b> PRIMERGY RX200 S8 2x Intel Xeon E5-2640 v2 2.00 GHz 32 GB Memory 2x 250 GB 7.2k rpm SATA Drive 2x onboard LAN 1 Gb/s 1x Dual Port LAN 1 Gb/s		
		<b>Tier B</b> PRIMERGY RX300 S8 2x Intel Xeon E5-2697 v2 2.70 GHz 512 GB Memory 2x 146 GB 15k rpm SAS Drives 6x 300 GB 15k rpm SAS Drives 2x onboard LAN 1 Gb/s 6x SAS RAID Controller		
		<b>Storage</b> 1x PRIMECENTER Rack 5x ETERNUS JX40 80x 200 GB SSD Drives		
Initial Database Size <b>10,257 GB</b>	Redundancy Level 1 <b>RAID-5 data and RAID-10 log</b>	Storage <b>80 x 200 GB SSD</b> <b>6 x 300 GB 15k rpm HDD</b>		



# PRIMERGY RX300 S8

**TPC-E 1.12.0  
TPC Pricing 1.7.0**

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Description	Part Number	Price Source	Unit Price	Qty	Extended Price	3-yr. Maint. Price
<b>Database Server (Tier B) Hardware</b>						
<b>PRIMERGY RX300S8</b>						
PY RX300S8	S26361-K1457-V401	1	1,440.00	1	1,440.00	
Modulare SV 450W platin hp	S26113-F575-E12	1	275.00	2	550.00	
Cable pow ercord rack, 4m, grey	T26139-Y1968-E100	1	12.00	2	24.00	
Power Supply Dummy	S26113-F574-E99	1	4.00	1	4.00	
Intel Xeon E5-2697 v2 12C/24T 2.70 GHz 30MB	S26361-F3791-E270	1	3,700.00	2	7,400.00	
32GB (1x32GB) 4Rx4 L DDR3-1600 LR ECC	S26361-F3782-E517	1	1,180.00	16	18,880.00	
Performance Mode Installation	S26361-F3694-E2	1	7.00	2	14.00	
DVD-RW supermulti slimline SATA	S26361-F3269-E2	1	106.00	1	106.00	
HD SAS 6G 146GB 15K HOT PL 2.5" EP	S26361-F4482-E514	1	335.00	2	670.00	
HD SAS 6G 300GB 15K HOT PL 2.5" EP	S26361-F4482-E530	1	510.00	6	3,060.00	
RAID Ctrl SAS 6G 1GB (D3116C)	S26361-F3669-E3	1	520.00	1	520.00	
RAID Ctrl SAS 6G 8Port ex 1GB LPLSI V3	S26361-F3713-L503	1	950.00	5	4,750.00	
Rack Mount Kit F1-C S7 LV	S26361-F2735-E175	1	145.00	1	145.00	
Rack Cable Arm 2U	S26361-F2735-E82	1	40.00	1	40.00	
Mounting in symmetrical Racks	S26361-F4530-E10	1	7.00	1	7.00	
Region-Kit APAC/America/EMEA/Indien	S26361-F1452-E100	1	7.00	1	7.00	
PRIMERGY RX300S8 Installation, normal business hours	PYR300-N038005-0NA	1	350.00	1		350.00
PYRX300 Series Warranty Uplift, 36 Months, Enhanced Plus Level, 24x7 4hr Onsite, Prepaid billing	PYR300-U004361-0NA	1	621.00	1		621.00
<b>Subtotal (*)</b>					<b>37,617.00</b>	<b>971.00</b>
<b>Storage</b>						
<b>PRIMECENTER RACK</b>						
PRIMECENTER M1 Rack 724S 24U-1050x700	S26361-K827-V220	1	2,400.00	1	2,400.00	
Dummy panel, plastics, 1U + assembly	S26361-F4530-L131	1	12.00	3	36.00	
Dummy panel, plastics, 2U + assembly	S26361-F4530-L132	1	12.00	6	72.00	
Socket strip 3phase 3x 8 sockets	S26361-F2262-L31	1	240.00	1	240.00	
PYPRIMECENTER during normal business hours, PRIMERGY Installation, Racks, One Time billing	PYPCTR-N076005-0NA	1	265.00	1		265.00
PYPRIMECENTER Warranty Uplift, 36 Months, Enhanced Plus Level, 24x7 4hr Onsite, Prepaid billing (PYPCTR-U004361-0NA)	PYPCTR-U004361-0NA	1	750.00	1		750.00
<b>ETERNUS JX40</b>						
ETERNUS JX40	FTS:ETJXS11BG		3,283.00	5	16,415.00	
SSD SAS 6G 200 GB MLC HOT PL 2.5" EP PERF	S26361-F4581-L200	1	1,920.00	80	153,600.00	
SAS CABLE 1X SFF 8088-1X SFF 8088 2M	D:KBSAS1S-1S-2M	1	73.00	5	365.00	
PYJX40 Warranty Uplift, 12 Months, Enhanced Plus Level, 24x7x365 Phone Support (Sev1 - Live Transfer), 24x7x365 Onsite and Parts (Sev1 Resp. Time - 4 Hours), Incl. Holidays, Prepaid billing	PYJX40-U004121-0NA	1	639.00	5		3,195.00
PYJX40 Post Warranty, 24 Months, Enhanced Plus Level, 24x7x365 Phone Support (Sev1 - Live Transfer), 24x7x365 Onsite and Parts (Sev1 Resp. Time - 4 Hours), Incl. Holidays, Prepaid billing	PYJX40-P004241-0NA	1	1,218.00	5		6,090.00
PYJX40 during normal business hours, Primergy storage installation, One Time billing	PYJX40-N043005-0NA	1	450.00	5		2,250.00
<b>Subtotal(*)</b>					<b>173,128.00</b>	<b>12,550.00</b>



# PRIMERGY RX300 S8

## TPC-E 1.12.0 TPC Pricing 1.7.0

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Database Server (Tier B) Software							
SQL Server 2012 Enterprise Edition 2 Core License	7JQ-00256	2	13,472.50	12	161,670.00		
Microsoft Windows Server 2012 Standard 2 Processor License	P73-05761	2	735.00	1	735.00		
Microsoft Problem Resolution Services	n/a	2	259.00	1			259.00
				<b>Subtotal</b>	162,405.00		259.00
Application Server (Tier A) Hardware							
<b>PrimerGY RX200 S8</b>							
PY RX200 S8, 4x2.5	S26361-K1455-V101	1	1,100.00	1	1,100.00		
Modulare SV 450W platin hp	S26113-F575-E10	1	275.00	1	275.00		
Power Supply Dummy	S26113-F574-E99	1	4.00	1	4.00		
Intel Xeon E5-2640 v2 8C/16T 2.00 GHz 20 MB	S26361-F3789-E200	1	1,220.00	2	2,440.00		
Fan upgrade kit 2nd CPU	S26361-F1386-E120	1	61.00	1	61.00		
8GB (1x8GB) 1Rx4 L DDR3-1600 R ECC	S26361-F3781-E515	1	166.00	4	664.00		
Independent Mode Installation	S26361-F3694-E10	1	7.00	2	14.00		
DVD-RW supermulti slimline SATA	S26361-F3269-E2	1	106.00	1	106.00		
HD SATA 6G 250GB 7.2K HOT PL 2.5" BC	S26361-F3708-E250	1	280.00	2	560.00		
Eth Ctrl 2x1Gbit PCIe x4 D2735-2 Cu lp	S26361-F3610-E202	1	225.00	1	225.00		
Rack Mount Kit F1-C S7 LV	S26361-F2735-E175	1	145.00	1	145.00		
Cable powercord rack, 4m, grey	T26139-Y1968-E100	1	12.00	1	12.00		
Mounting in symmetrical Racks	S26361-F4530-E10	1	7.00	1	7.00		
Region-Kit APAC/America/EMEA/Indien	S26361-F1452-E100	1	7.00	1	7.00		
PRIMERGY RX200S8 Installation, normal business hours	PYR200-N038005-0NA	1	200.00	1			200.00
PYRX200 Series Warranty Uplift, 36 Months, Enhanced Plus Level, 24x7 4hr Onsite, Prepaid billing (PYR200-U004361-0NA)	PYR200-U004361-0NA	1	750.00	1			750.00
				<b>Subtotal(*)</b>	5,620.00		950.00
Application Server (Tier A) Software							
Microsoft Windows Server 2012 Standard 2 Processor License	P73-05761	2	735.00	1	735.00		
				<b>Subtotal</b>	735.00		
Miscellaneous							
DISPLAY B20T-6 LED (incl 2spares)	S26361-K1416-V140	1	200.00	3	600.00		
Infrastructure or Connectivity							
KB400 USB grey INT USA (incl 2 spares)	S26381-K550-E102	1	14.00	3	42.00		
Mouse M480 grey (incl 2 spares)	S26381-K431-E101	1	8.00	3	24.00		
LAN-CAT 5 Enhanced, l=3m	T26139-Y2425-M3	1	5.00	2	10.00		
				<b>Subtotal(*)</b>	676.00		0.00
				<b>Total</b>	380,181.00		14,730.00
Dollar Volume Discount (see Notes)		28%	1		60,771.48		
					319,409.52		

Notes: Price Source: 1=Fujitsu, 2=Microsoft Corporation Discount applies to all subtotal marked with(*) . Pricing is for these or similar quantities. Discounts for similiary sized configurations will be similar to what is quoted here, but may vary based on the specific components priced.	<b>Three-Year Cost of Ownership USD</b>	\$334,140
	<b>TPC-E Throughput</b>	2472.58
	<b>\$ USD/tpsE</b>	\$135.14

The benchmark results and test methodology were audited by Doug Johnson for InfoSizing Inc. (www.sizing.com)

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.



# PRIMERGY RX300 S8

**TPC-E 1.12.0**  
**TPC Pricing 1.7.0**

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## Numerical Quantities Summary

Reported Throughput:	2,472.58 tpsE	Configured Customers:	1,250,000	
Response Times (in seconds)	Minimum	Average	90th%tile	Maximum
Broker Volume	0.00	0.01	0.02	0.19
Customer Position	0.00	0.01	0.02	1.35
Market Feed	0.00	0.01	0.02	0.62
Market Watch	0.00	0.01	0.01	0.64
Security Detail	0.00	0.00	0.01	0.77
Trade Lookup	0.00	0.07	0.10	0.84
Trade Order	0.00	0.02	0.03	1.89
Trade Result	0.00	0.02	0.04	2.71
Trade Status	0.00	0.01	0.01	1.29
Trade Update	0.01	0.08	0.11	0.84
Data Maintenance	0.00	0.01	N/A	0.07
Transaction Mix	Transaction Count		Mix %	
Broker Volume	8,723,315		4.900%	
Customer Position	23,143,554		13.000%	
Market Feed	1,780,265		1.000%	
Market Watch	32,044,877		18.000%	
Security Detail	24,923,837		14.000%	
Trade Lookup	14,241,869		8.000%	
Trade Order	17,980,738		10.100%	
Trade Result	17,802,617		10.000%	
Trade Status	33,824,983		19.000%	
Trade Update	3,560,415		2.000%	
Data Maintenance	120		N/A	
Test Duration and Timings				
Ramp-up Time (hh:mm:ss)	00:16:37			
Measurement Interval (hh:mm:ss)	02:00:00			
Business Recovery Time (hh:mm:ss)	00:23:37			
Total Number of Transactions Completed	178,026,470			