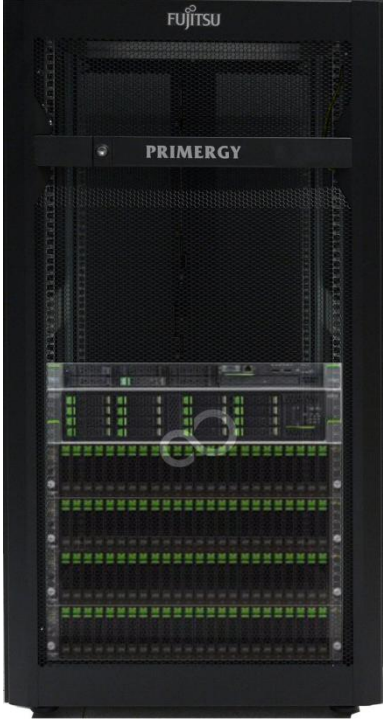
		<b>PRIMERGY RX300 S7</b>			<b>TPC-E 1.12.0</b> <b>TPC Pricing 1.7.0</b> <b>TPC-Energy 1.4.2</b>
					Report Date July 5, 2012
TPC-E Throughput <b>1,871.81 tpsE</b>	Price/Performance <b>\$ 175.57 USD per tpsE</b>	Availability Date <b>August 17, 2012</b>	Total System Cost <b>\$ 328,623</b>	TPC-Energy Metric <b>0.69 Watts/tpsE</b>	
<b>Database Server Configuration</b>					
Operating System <b>Microsoft Windows Server 2008 R2 Enterprise Edition SP1</b>		Database Manager <b>Microsoft SQL Server 2012 Enterprise Edition</b>		Processors/Cores/Threads <b>2/16/32</b>	Memory <b>512 GB</b>
<b>SUT</b>					
			<b>Tier A</b> PRIMERGY RX200 S7 1x Intel Xeon E5-2660 2.20 GHz 16 GB Memory 1x 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 S7 2x Intel Xeon E5-2690 2.90 GHz 512 GB Memory 8x 146 GB 15k rpm SAS Drives 2x onboard LAN 1 Gb/s 5x SAS RAID Controller		
<b>Storage</b> 1x PRIMECENTER Rack 4x ETERNUS JX40 60x 200 GB SSD Drives 2x 1 TB 7.2k rpm SATA Drives					
Initial Database Size <b>7,704 GB</b>		Redundancy Level 1 <b>RAID-5 data and RAID-10 log</b>		Storage <b>60 x 200 GB SSD</b> <b>2 x 1 TB 7.2k rpm HDD</b> <b>6 x 146 GB 15k rpm HDD</b>	



# PRIMERGY RX300 S7

**TPC-E 1.12.0**  
**TPC Pricing 1.7.0**  
**TPC-Energy 1.4.2**

Report Date  
 July 5, 2012

Availability Date  
 August 17, 2012

Description	Part Number	Price Source	Unit Price	Qty	Extended Price	3-yr. Maint. Price
<b>Database Server (Tier B) Hardware</b>						
<b>PRIMERGY RX300S7</b>				1	65,198.00	
PY RX300S7 8x2.5" HDD bays	S26361-K1373-V201			1		
Modular PSU 800W platinum hp	S26113-F574-E10			1		
Power Supply Dummy	S26113-F574-E99			1		
Cable power cord rack, 4m, grey	T26139-Y1968-E100			1		
Intel Xeon E5-2690 8C/16T 2.90 GHz	S26361-F3686-E290			2		
32GB(1x32GB) 4Rx4 L DDR3-1333 LR ECC	S26361-F3698-E517			16		
Performance Mode Installation	S26361-F3694-E2			2		
DVD-RW supermulti slimline SATA	S26361-F3269-E2			1		
HD SAS 6G 146GB 15K HOT PL 2.5" EP	S26361-F4482-E514			8		
RAID Ctrl SAS 6G 1GB (D3116)	S26361-F3669-E1			1		
RAID Ctrl SAS 6G 8Port ex 1GB FH/LP LSI	S26361-F3713-L501			4		
Rack-Mount Kit F1-C S7 LV	S26361-F2735-E175			1		
Rack Cable Arm 2U	S26361-F2735-E82			1		
Mounting in symmetrical Racks	S26361-F4530-E10			1		
region kit APAC/America/EMEA/Indien	S26361-F1452-E100			1		
PRIMERGY RX300S7 Installation, normal business hours	PYR300-N038005-0NA		350.00	1		350.00
PYRX300 Series Warranty Uplift, 36 Months, Enhanced Plus Level, 24x7 4hr Onsite, Prepaid billing (PYR300-U004361-0NA)	PYR300-U004361-0NA		931.00	1		931.00
				<b>Subtotal (*)</b>	65,198.00	1,281.00
<b>Storage</b>						
<b>PRIMECENTER RACK</b>				1	2,400.00	
PRIMECENTER M1 Rack 724S 24U-1050x700	S26361-K827-V220			1		
Dummy panel, plastics, 1U + assembly	S26361-F4530-L131			3		
Dummy panel, plastics, 2U + assembly	S26361-F4530-L132			6		
Socket strip 3phase 3x 8 sockets	S26361-F2262-L31		210.00	1	210.00	
PYPRIMECENTER Warranty Uplift, 36 Months, Enhanced Plus Level, 24x7 4hr Onsite, Prepaid billing (PYPCTR-U004361-0NA)	PYPCTR-U004361-0NA		720.00	1		720.00
<b>ETERNUS JX40</b>				1	2,611.00	
ETERNUS JX40	FTS:ETJXS11BG			4	10,444.00	
PRIMERGY Rackinstallation SX/DX ex works	D:FCSX-INPSR			4		
SSD SAS 6G 200 GB MLC NO HP 2.5" EP PERF	S26361-F4581-L200		3,350.00	60	201,000.00	
SAS CABLE 1X SFF 8088-1X SFF 8088 2M	D:KBSAS1S-1S-2M		70.00	4	280.00	
HD SATA 1000 GB 2.5"	S26361-F3601-L100		510.00	2	1,020.00	
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		609.00	4		2,436.00
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		1,218.00	4		4,872.00
PYJX40 during normal business hours, Primergy storage installation, One Time billing	PYJX40-N043005-0NA		450.00	4		1,800.00
				<b>Subtotal(*)</b>	215,354.00	9,828.00



# PRIMERGY RX300 S7

**TPC-E 1.12.0**  
**TPC Pricing 1.7.0**  
**TPC-Energy 1.4.2**

Report Date  
 July 2, 2012

Availability Date  
 August 17, 2012

Database Server (Tier B) Software							
SQL Server 2012 Enterprise Edition 2Core License	7JQ-00256	2	13,472.50	8	107,780.00		
Windows Server 2008 R2 Enterprise Edition	P72-04217	2	2,280.00	1	2,280.00		
Microsoft Problem Resolution Services	n/a	2	259.00	1			259.00
				<b>Subtotal</b>	<b>110,060.00</b>		<b>259.00</b>
Application Server (Tier A) Hardware							
<b>Primergy RX200 S7</b>							
PY RX200 S7, 4x2.5	S26361-K1386-V101	1	4,274.00	1	4,274.00		
Modulare SV 450W platin hp	S26113-F575-E10	1		1			
Power Supply Dummy	S26113-F574-E99	1		1			
Intel Xeon E5-2660 8C/16T 2.20 GHz 20MB	S26361-F3691-E220	1		1			
4GB (1x4GB) 2Rx8 L DDR3-1600 U ECC	S26361-F3694-E514	1		4			
Performance Mode Installation	S26361-F3694-E2	1		1			
DVD-RW supermulti slimline SATA	S26361-F3269-E2	1		1			
HD SATA 6G 250GB 7.2K HOT PL 2.5" BC	S26361-F3708-E250	1		1			
Eth Ctrl 2x1Gbit PCIe x4 D2735-2 Cu lp	S26361-F3610-E202	1		1			
Rack Mount Kit F1-C S7 LV	S26361-F2735-E175	1		1			
Rack Cable Arm 1U	S26361-F2735-E81	1		1			
Cable pow ercord rack, 4m, grey	T26139-Y1968-E100	1		1			
Mounting in symmetrical Racks	S26361-F4530-E10	1		1			
region kit APAC/America/EMEA/Indien	S26361-F1452-E100	1		1			
PRIMERGY RX200S7 Installation, normal business hours	PYR200-N038005-ONA	1	200.00	1			200.00
PYRX200 Series Warranty Uplift, 36 Months, Enhanced Plus Level, 24x7 4hr Onsite, Prepaid billing (PYR300-U004361-ONA)	PYR200-U004361-ONA	1	750.00	1			750.00
				<b>Subtotal(*)</b>	<b>4,274.00</b>		<b>950.00</b>
Application Server (Tier A) Software							
Windows Server 2008 R2 Standard x64 Edition	P73-04165	2	711.00	1	711.00		
				<b>Subtotal</b>	<b>711.00</b>		
Miscellaneous							
DISPLAY B20T-6 LED (incl 2spares)	S26361-K1416-V140	1	187.20	3	561.60		
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>	<b>637.60</b>		<b>0.00</b>
				<b>Total</b>	<b>396,234.60</b>		<b>12,318.00</b>
Dollar Volume Discount (see Notes)		28%	1		79,929.81		
					<b>316,304.79</b>		

Notes:	<b>Three-Year Cost of Ownership USD</b>	\$328,623
Price Source: 1=Fujitsu, 2=Microsoft Corporation	<b>TPC-E Throughput</b>	1,871.81
Discount applies to all subtotal marked with(*) .	<b>\$ USD/tpsE</b>	\$175.57
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.		

The benchmark results and test methodology were audited by Francois Raab 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 S7

**TPC-E 1.12.0**  
**TPC Pricing 1.7.0**  
**TPC-Energy 1.4.2**

Report Date  
 July 5, 2012

Availability Date  
 August 17, 2012

## Numerical Quantities Summary

Reported Throughput:	1,871.81 tpsE	Configured Customers:	940,000	
Response Times (in seconds)	Minimum	Average	90th%tile	Maximum
Broker Volume	0.00	0.01	0.03	0.39
Customer Position	0.00	0.01	0.02	0.97
Market Feed	0.00	0.01	0.02	1.01
Market Watch	0.00	0.01	0.02	1.00
Security Detail	0.00	0.01	0.01	0.61
Trade Lookup	0.00	0.07	0.11	1.22
Trade Order	0.00	0.03	0.05	0.96
Trade Result	0.00	0.03	0.05	0.98
Trade Status	0.00	0.01	0.02	0.93
Trade Update	0.01	0.08	0.12	1.22
Data Maintenance	0.00	0.02	N/A	0.05
Transaction Mix	Transaction Count		Mix %	
Broker Volume	6,603,955		4.900%	
Customer Position	17,520,233		13.000%	
Market Feed	1,347,712		1.000%	
Market Watch	24,258,833		18.000%	
Security Detail	18,867,950		14.000%	
Trade Lookup	10,781,456		8.000%	
Trade Order	13,611,846		10.100%	
Trade Result	13,477,103		10.000%	
Trade Status	25,606,833		19.000%	
Trade Update	2,695,416		2.000%	
Data Maintenance	120		N/A	
Test Duration and Timings				
Ramp-up Time (hh:mm:ss)	00:26:15			
Measurement Interval (hh:mm:ss)	02:00:00			
Business Recovery Time (hh:mm:ss)	00:13:29			
Total Number of Transactions Completed	134,771,337			

<b>PRIMERGY RX300 S7</b>	<b>Energy Summary</b>			<b>TPC-E 1.12.0 TPC Pricing 1.7.0 TPC-Energy 1.4.2</b>
				Report Date July 5, 2012
				Availability Date August 17, 2012

TPC-E Throughput <b>1,871.81 tpsE</b>	Price/Performance <b>\$ 175.57 USD per tpsE</b>	Availability Date <b>August 17, 2012</b>	Total System Cost <b>\$ 328,623</b>	TPC-Energy Metric <b>0.69 Watts/tpsE</b>
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**Numerical Quantities For Reported Energy Configuration:**

**REC Idle Power: 843.88 Watts**  
**Average Power of REC : 1,288.82 Watts**

**Subsystem Reporting:**

	Secondary Metrics	Additional Numerical Quantities			
	watts/tpsE	Full Load Avg Watts	Full Load % of REC	Idle Avg Watts	Idle % of REC
<b>Database Server *)</b>	0.32	592.41	45.97%	239.56	28.39%
<b>Storage *)</b>	0.31	578.42	44.88%	544.80	64.56%
<b>Application Server *)</b>	0.05	100.99	7.84%	59.12	7.01%
<b>Miscellaneous *)</b>	0.01	17.00	1.32%	0.40	0.05%
<b>Total REC</b>	0.69	1,288.82	100.00%	843.88	100.00%

\*) see pricing for list of components

**Lowest ambient temperature at air inlet: 20.13 Degrees Celsius**

**Items in Priced Configuration not in the Reported Energy Configuration**  
**None**

**Items in the Reported Energy Configuration not in the Measured Energy Configuration**  
**Fujitsu Display B20T-6 LED**