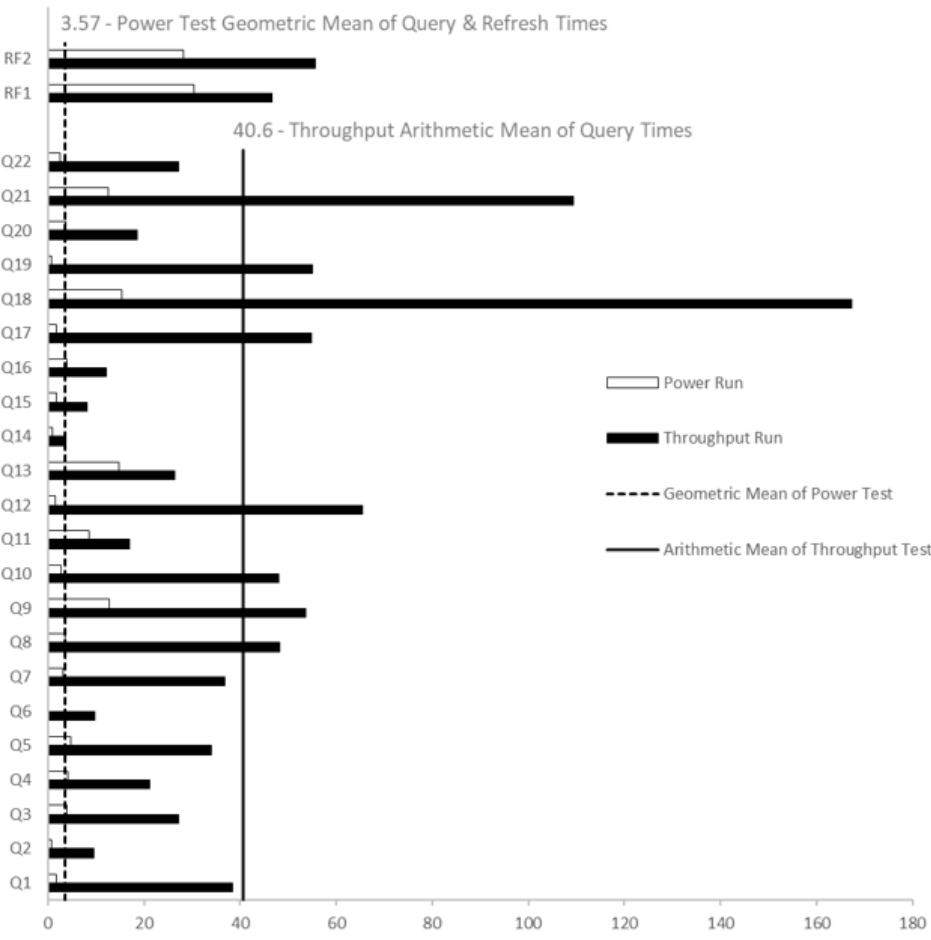


Hewlett Packard Enterprise		HPE ProLiant DL345 Gen11 (with AMD EPYC 9575F)		TPC-H Rev. 3.0.1 TPC Pricing Rev. 2.9.0
Total System Cost		Composite Query per Hour Rating		Report Date: November 10, 2025
\$617,630 USD		2,500,231.4 QphH @ 3,000GB		\$247.03 USD \$ / kQphH @ 3,000GB
Database Size	Database Manager	Operating System	Other Software	Availability Date
3,000GB	Microsoft® SQL Server 2025 Enterprise Edition	Microsoft Windows Server 2025	None	May 22, 2026



Database Load Time = 0d 01h 16m 53s	Storage Redundancy Level																	
Load included backup: Y	Base Tables and Auxiliary Data Structures	No RAID																
Total Data Storage / Database Size = 12.22	DB Root, transaction log, DB Backup	SW RAID																
Memory/Database Size = 51.2%	OS	HW RAID																
<table><tr><th>System Components</th><th>System Total</th></tr><tr><td>Nodes:</td><td>1</td></tr><tr><td>AMD® EPYC 9575F @ 3.3GHz:</td><td>1</td></tr><tr><td>Cores/Threads:</td><td>64/128</td></tr><tr><td>Memory:</td><td>1536 GiB</td></tr><tr><td>3.84TB NVMe Drives</td><td>10</td></tr><tr><td>RAID1 Boot Controller with 480GB M.2 NVMe</td><td>2</td></tr><tr><td>Total Storage:</td><td>36,656.86 GiB</td></tr></table>			System Components	System Total	Nodes:	1	AMD® EPYC 9575F @ 3.3GHz:	1	Cores/Threads:	64/128	Memory:	1536 GiB	3.84TB NVMe Drives	10	RAID1 Boot Controller with 480GB M.2 NVMe	2	Total Storage:	36,656.86 GiB
System Components	System Total																	
Nodes:	1																	
AMD® EPYC 9575F @ 3.3GHz:	1																	
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3.84TB NVMe Drives	10																	
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Total Storage:	36,656.86 GiB																	

 Hewlett Packard Enterprise	HPE ProLiant DL345 Gen11	TPC-H Rev. 3.0.1 TPC Pricing Rev. 2.9.0				
		Report Date: November 10,2025				
Description	PriceKey	Part Number	Unit Price	Qty	Extended Price	3 Yr Maint Price
Server Hardware						
HPE DL345 Gen11 EDSFF CTO Svr	1	P54207-B21	\$4,200	1	\$4,200	
AMD EPYC 9575F CPU for HPE	1	P72758-B21	\$22,623	1	\$22,623	
HPE DL3X5 Gen11 Perf 2U Heat Sink Kit	1	P58459-B21	\$256	1	\$256	
HPE DL3X5 Gen11 2U Perf Fan Kit	1	P58465-B21	\$160	1	\$160	
HPE 128GB 2Rx4 PC5-6400B-R Smart Kit	1	P69730-B21	\$13,778	12	\$165,336	
HPE 1600W FS Plat Ht Plg LH Pwr Sply Kit	1	P38997-B21	\$890	2	\$1,780	
MLX MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adptr	1	P42044-B21	\$1,500	3	\$1,500	
HPE 48U 600x1075mm Adv G2 Kit Plt Rack	1	P9K19A	\$3,023	1	\$3,023	
HPE 3Y TC Ess DL345 Gen11 SVC	1	H78X5E	\$3,962	1		\$3,962
Subtotal					\$198,878	\$3,962
Storage						
HPE 3.84TB NVMe RI E3S EC1 PM1743 SSD	1	P57799-B21	\$7,826	10	\$78,260	
HPE NS204i-u Gen11 Ht Plg Boot Opt Dev	1	P48183-B21	\$1,795	1	\$1,795	
HPE DL3X5 G11 NS204i-u NVMe Boot Cbl Kit	1	P57013-B21	\$83	1	\$83	
HPE DL345 Gen11 20EDSFF x4 FIO Kit	1	P64383-B21	\$1,192	1	\$1,192	
HPE DL345 G11 2SFF x4 TM BC Kit	1	P57110-B21	\$756	1	\$756	
HPE DL3XX Gen11 Easy Install Rail 2 Kit	1	P52351-B21	\$141	1	\$141	
HPE DL345G11 Standard Riser	1	standardDL345G11Riser incld.		1		
Subtotal					\$82,227	\$0
Other						
s 5 23.8 inch FHD White Monitor + HP Wireless Mouse and Keyboard 300 Bundle	3	94C21AA/ 3ML04AA	\$150	3	\$450	
Subtotal					\$450	\$0
Software Components						
SQL Server 2025 Enterprise Edition (2 core license)	2	N/A	\$15,123	32	\$483,936	
Microsoft Problem Resolution Services	2	N/A	\$259	1		\$259
Windows Server 2025 Standard Edition (16 core license)	2	N/A	1,176	4	4,704	
Subtotal					\$488,640	\$259
Total Extended Price					\$770,195	\$4,221
Total Discounts					\$154,607	\$2,179.00
Price Key: 1 - HPE , 2 – Microsoft, 3 – Hewlett Packard Inc.		Grand Total				
Audited by Doug Johnson of InfoSizing (www.sizing.com)		\$615,587.60 \$2,042.00				
All discounts are based on US list prices and for similar quantities and configurations. A 55% discount was based on the overall specific components pricing from vendor 1 in this single quotation. Discounts for similarly sized configurations will be similar to those quoted here, but may vary based on the components in the configuration.		3 year cost of ownership USD:				
		\$617,630.00				
		QphH @ 3,000GB :				
		2,500,231.4				
		\$ USD/QphH @ 3,000GB				
		\$247.03				
Sales contact: HPE WW Headquarters, 3000 Hanover St., Palo Alto, CA 94304-1185 (855)472-5233 / (800)786-7967 / (888)269-4073 (US)						
Microsoft Corporation, One Microsoft Way, Redmond, WA 98052-6399 (425) 882 8080						
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 sections of the TPC benchmark specifications. If you find that the stated prices are not available according to these terms, please inform at pricing@tpc.org. Thank you.						

 Hewlett Packard Enterprise	HPE ProLiant DL345 Gen11	TPC-H Rev. 3.0.1 TPC Pricing Rev. 2.9.0
		Report Date: November 10,2025

Numerical Quantities					
Measurement Results					
Database Scale Factor					3,000
Total Data Storage / Database Size					12.22
Percentage Memory / Database Size					51.2%
Start of Database Load					2025-10-31 07:47:22
End of Database Load					2025-10-31 09:04:15
Database Load Time					00d 01h 16m 53s
Query Streams for Throughput Test					8
TPC-H Power					3,026,950.6
TPC-H Throughput					2,065,166.6
TPC-H Composite Query-per-Hour (QphH@3,000GB)					2,500,231.4
Total System Price over 3 Years (\$ USD)					\$617,630
TPC-H Price/Performance Metric (\$ USD / kQphH@3,000GB)					\$247.03
Measurement Interval					
Measurement Interval in Throughput Test					920.41 seconds
Duration of Stream Execution					
Power Run	Seed	Query Start Time	Total Time	RF1 Start Time	RF2 Start Time
		Query End Time	(hh:mm:ss)	RF1 End Time	RF2 End Time
	1031090415	2025-10-31 09:24:44	00:01:47	2025-10-31 09:24:12	2025-10-31 09:26:33
		2025-10-31 09:26:31		2025-10-31 09:24:42	2025-10-31 09:27:02
Throughput Stream	Seed	Query Start Time	Total Time	RF1 Start Time	RF2 Start Time
		Query End Time	(hh:mm:ss)	RF1 End Time	RF2 End Time
1	1031090416	2025-10-31 09:27:01	00:14:38	2025-10-31 09:27:01	2025-10-31 09:27:49
		2025-10-31 09:41:39		2025-10-31 09:27:49	2025-10-31 09:28:42
2	1031090417	2025-10-31 09:27:01	00:15:08	2025-10-31 09:28:42	2025-10-31 09:29:27
		2025-10-31 09:42:09		2025-10-31 09:29:27	2025-10-31 09:30:32
3	1031090418	2025-10-31 09:27:01	00:13:45	2025-10-31 09:30:32	2025-10-31 09:31:21
		2025-10-31 09:40:46		2025-10-31 09:31:21	2025-10-31 09:32:12
4	1031090419	2025-10-31 09:27:01	00:15:17	2025-10-31 09:32:12	2025-10-31 09:33:02
		2025-10-31 09:42:18		2025-10-31 09:33:02	2025-10-31 09:33:53
5	1031090420	2025-10-31 09:27:01	00:15:09	2025-10-31 09:33:54	2025-10-31 09:34:35
		2025-10-31 09:42:10		2025-10-31 09:34:35	2025-10-31 09:35:32
6	1031090421	2025-10-31 09:27:01	00:15:07	2025-10-31 09:35:32	2025-10-31 09:36:21
		2025-10-31 09:42:08		2025-10-31 09:36:21	2025-10-31 09:37:17
7	1031090422	2025-10-31 09:27:01	00:14:48	2025-10-31 09:37:17	2025-10-31 09:38:07
		2025-10-31 09:41:49		2025-10-31 09:38:07	2025-10-31 09:39:06
8	1031090423	2025-10-31 09:27:01	00:15:21	2025-10-31 09:39:06	2025-10-31 09:39:49
		2025-10-31 09:42:22		2025-10-31 09:39:49	2025-10-31 09:40:43



**Hewlett Packard
Enterprise**

HPE ProLiant DL345 Gen11

TPC-H Rev. 3.0.1
TPC Pricing Rev. 2.9.0
Report Date:
November 10, 2025

TPC-H Timing Intervals (in seconds):

Stream ID	0	1	2	3	4	5	6	7	8	QI Min	QI Avg	QI Max
Q1	1.69	3.66	52.84	36.14	38.22	75.72	48.37	29.23	24.17	1.69	34.45	75.72
Q2	0.67	7.28	14.18	10.98	8.80	8.42	8.20	8.33	9.81	0.67	8.52	14.18
Q3	3.92	23.86	23.38	14.12	36.75	34.71	17.55	23.50	44.27	3.92	24.67	44.27
Q4	4.14	8.34	10.70	6.39	53.06	15.94	25.03	34.50	16.03	4.14	19.35	53.06
Q5	4.77	27.84	18.30	26.47	27.73	15.70	74.08	36.63	45.63	4.77	30.79	74.08
Q6	0.19	16.70	1.36	17.83	8.80	7.95	0.81	8.89	16.35	0.19	8.76	17.83
Q7	3.09	18.59	56.05	52.63	14.77	58.83	27.47	40.72	24.95	3.09	33.01	58.83
Q8	3.52	42.19	63.23	27.09	56.02	59.80	40.81	44.75	52.99	3.52	43.38	63.23
Q9	12.72	67.67	54.25	46.56	67.77	37.00	64.27	67.88	24.52	12.72	49.18	67.88
Q10	2.67	79.25	48.11	65.13	46.00	15.33	60.83	21.19	49.30	2.67	43.09	79.25
Q11	8.55	17.30	18.25	21.33	16.63	16.78	14.88	21.83	9.22	8.55	16.09	21.83
Q12	1.64	98.00	46.67	69.03	18.14	61.31	68.73	55.47	106.45	1.64	58.38	106.45
Q13	14.84	21.77	23.55	28.81	32.08	34.42	26.50	21.82	23.10	14.84	25.21	34.42
Q14	0.97	4.16	1.98	5.28	2.53	3.35	3.82	5.81	2.91	0.97	3.42	5.81
Q15	1.67	3.63	9.96	7.11	6.30	3.28	9.14	10.02	15.81	1.67	7.44	15.81
Q16	3.94	8.97	6.47	10.47	8.56	27.09	10.45	11.94	13.02	3.94	11.21	27.09
Q17	1.70	72.91	63.25	21.45	75.06	40.22	47.85	55.84	62.95	1.70	49.03	75.06
Q18	15.47	148.69	218.31	133.16	207.98	154.21	155.17	172.84	148.58	15.47	150.49	218.31
Q19	0.78	41.81	42.74	45.84	72.53	53.19	39.73	81.43	63.25	0.78	49.03	81.43
Q20	3.83	13.48	11.52	23.21	5.30	18.24	31.09	28.49	17.62	3.83	16.98	31.09
Q21	12.52	135.69	89.69	120.62	103.11	125.77	123.19	66.52	111.56	12.52	98.74	135.69
Q22	2.63	15.59	32.25	34.67	10.14	40.65	7.95	38.97	37.71	2.63	24.51	40.65
RF1	30.37	47.06	45.30	49.08	50.11	41.41	48.28	49.64	42.67	30.37	44.88	50.11
RF2	28.22	52.70	64.39	50.56	51.11	57.08	56.02	58.91	54.42	28.22	52.60	64.39