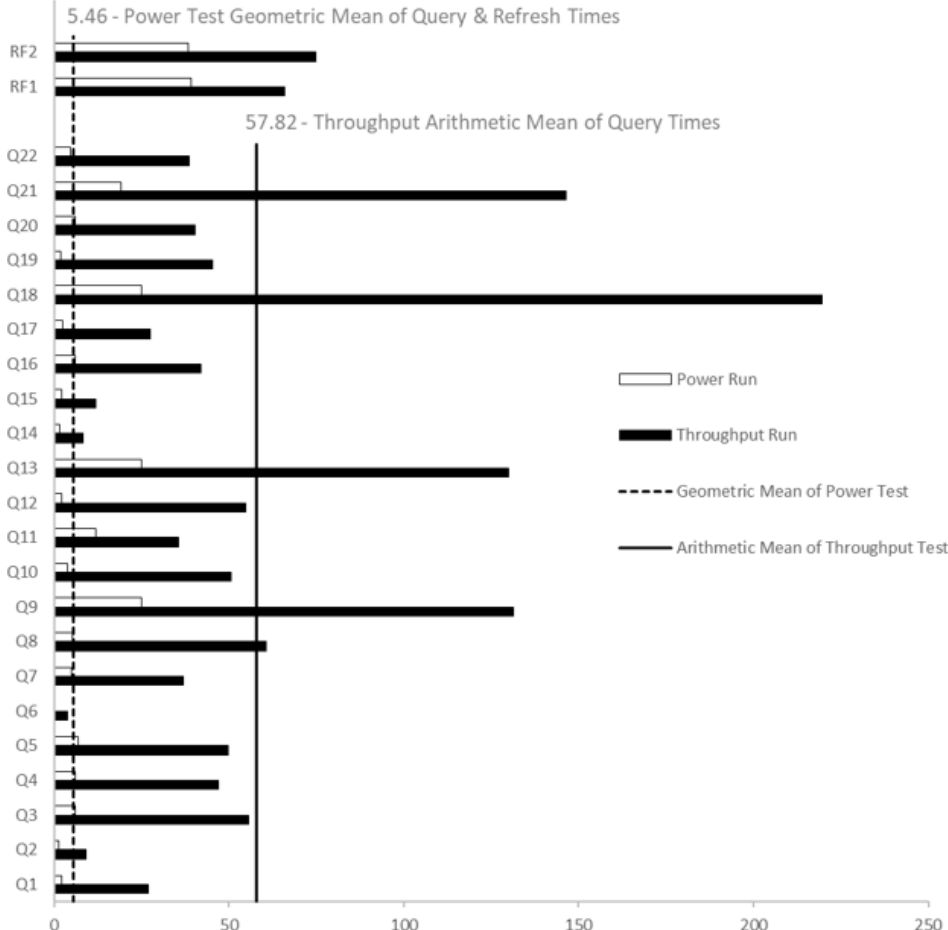


 Hewlett Packard Enterprise		HPE ProLiant DL345 Gen11 (with AMD EPYC 9375F)		TPC-H Rev. 3.0.1 TPC Pricing Rev. 2.9.0
Total System Cost		Composite Query per Hour Rating		Report Date: November 10, 2025
\$367,905 USD		1,700,864.3 QphH @ 3,000GB		\$216.31 USD \$ / kQphH @ 3,000GB
Database Size	Database Manager	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 02h 11m 46s	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	Software RAID
Memory/Database Size = 51.2%	OS, transaction logs	Hardware RAID 1

System Components	System Total
Nodes:	1
AMD® EPYC 9375F @ 3.85GHz:	1
Cores/Threads:	32/64
Memory:	1536 GiB
3.84TB NVMe Drives	10
RAID1 Boot Controller with 480GB M.2 NVMe	2
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 9375F CPU for HPE	1	P72667-B21	\$10,612	1	\$10,612	
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	P25960-B21	\$1,500	1	\$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					\$186,867	\$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		1		
Subtotal					\$82,227	\$0
Other						
HP Series 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	16	\$241,968	
Microsoft Problem Resolution Services	2	N/A	\$259	1		\$259
Windows Server 2025 Standard Edition (16 core license)	2	N/A	1,176	2	2,352	
Subtotal					\$244,320	\$259
Total Extended Price					\$513,864	\$4,221
Total Discounts					\$148,001	\$2,179
Price Key: 1 - HPE , 2 – Microsoft, 3 – Hewlett Packard Inc.		Grand Total			\$365,862.60	\$2,042
Audited by Doug Johnson of InfoSizing (www.sizing.com)		3 year cost of ownership USD:			\$367,905.00	
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.		QphH @ 3,000GB :			1,700,864.3	
		\$ USD/QphH @ 3,000GB			\$216.31	
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

2025-11-03 07:55:59

End of Database Load

2024-11-03 10:07:45

Database Load Time

00d 02h 11m 46s

Query Streams for Throughput Test

8

TPC-H Power

1,977,450.8

TPC-H Throughput

1,462,964.1

TPC-H Composite Query-per-Hour (QphH@3,000GB)

1,700,864.3

Total System Price over 3 Years (\$ USD)

\$367,905

TPC-H Price/Performance Metric (\$ USD / kQphH@3,000GB)

\$216.31

Measurement Interval

Measurement Interval in Throughput Test

1,299.28 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
	1103100745	2025-11-03 10:10:38	00:02:50	2025-11-03 10:09:56	2025-11-03 10:13:30
		2025-11-03 10:13:28		2025-11-03 10:10:35	2025-11-03 10:14:08
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	1103100746	2025-11-03 10:14:07	00:21:21	2025-11-03 10:14:07	2025-11-03 10:15:15
		2025-11-03 10:35:28		2025-11-03 10:15:15	2025-11-03 10:16:31
2	1103100747	2025-11-03 10:14:07	00:20:59	2025-11-03 10:16:32	2025-11-03 10:17:38
		2025-11-03 10:35:06		2025-11-03 10:17:38	2025-11-03 10:18:46
3	1103100748	2025-11-03 10:14:07	00:21:41	2025-11-03 10:18:47	2025-11-03 10:19:54
		2025-11-03 10:35:48		2025-11-03 10:19:54	2025-11-03 10:21:07
4	1103100749	2025-11-03 10:14:07	00:21:20	2025-11-03 10:21:07	2025-11-03 10:22:14
		2025-11-03 10:35:27		2025-11-03 10:22:14	2025-11-03 10:23:30
5	1103100750	2025-11-03 10:14:07	00:20:56	2025-11-03 10:23:30	2025-11-03 10:24:35
		2025-11-03 10:35:03		2025-11-03 10:24:35	2025-11-03 10:25:51
6	1103100751	2025-11-03 10:14:08	00:21:31	2025-11-03 10:25:51	2025-11-03 10:26:56
		2025-11-03 10:35:39		2025-11-03 10:26:56	2025-11-03 10:28:09
7	1103100752	2025-11-03 10:14:08	00:21:37	2025-11-03 10:28:10	2025-11-03 10:29:16
		2025-11-03 10:35:45		2025-11-03 10:29:16	2025-11-03 10:30:36
8	1103100753	2025-11-03 10:14:08	00:20:20	2025-11-03 10:30:37	2025-11-03 10:31:41
		2025-11-03 10:34:28		2025-11-03 10:31:41	2025-11-03 10:32:57



**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	2.16	14.03	22.83	45.44	31.61	10.91	30.36	41.53	19.10	2.16	24.22	45.44
Q2	1.38	8.02	3.84	6.42	9.78	9.25	15.13	4.61	16.60	1.38	8.34	16.60
Q3	5.97	55.69	58.58	7.99	35.41	88.94	37.88	63.32	97.52	5.97	50.14	97.52
Q4	5.95	24.38	40.52	50.60	49.57	37.33	82.73	50.61	40.14	5.95	42.43	82.73
Q5	6.98	41.08	74.74	61.22	46.68	30.80	44.46	47.69	50.78	6.98	44.94	74.74
Q6	0.25	7.08	0.80	8.41	5.99	5.99	1.00	0.91	0.91	0.25	3.48	8.41
Q7	4.88	36.89	24.28	40.63	37.89	50.74	44.89	37.58	22.85	4.88	33.40	50.74
Q8	5.08	51.03	50.71	52.75	71.82	48.44	76.71	74.52	59.94	5.08	54.56	76.71
Q9	25.00	195.04	125.98	124.62	85.94	127.57	148.70	145.56	96.49	25.00	119.43	195.04
Q10	3.77	57.05	53.16	49.83	58.82	57.68	52.50	42.74	32.16	3.77	45.30	58.82
Q11	11.99	67.26	19.27	84.27	22.39	24.31	21.42	25.36	20.08	11.99	32.93	84.27
Q12	2.06	41.85	81.76	26.06	73.43	67.30	85.24	13.85	48.93	2.06	48.94	85.24
Q13	25.03	106.23	137.13	160.28	133.34	124.70	126.71	132.59	118.63	25.03	118.29	160.28
Q14	1.55	8.83	10.08	10.89	10.31	9.45	10.00	5.30	1.61	1.55	7.56	10.89
Q15	2.17	13.45	4.47	18.10	16.16	16.67	5.45	5.47	15.34	2.17	10.81	18.10
Q16	6.06	31.00	31.63	29.38	44.58	73.38	48.07	29.35	47.91	6.06	37.93	73.38
Q17	2.44	16.47	22.11	30.02	33.99	23.97	20.97	23.25	49.00	2.44	24.69	49.00
Q18	24.88	199.11	245.97	236.25	245.89	169.18	209.19	236.55	214.17	24.88	197.91	245.97
Q19	1.94	44.30	25.03	53.25	47.80	31.35	53.04	61.33	47.07	1.94	40.57	61.33
Q20	5.94	50.85	40.57	28.86	32.42	28.28	46.10	56.85	37.97	5.94	36.43	56.85
Q21	19.14	166.81	155.68	136.38	138.07	183.86	93.94	151.59	145.12	19.14	132.29	183.86
Q22	4.53	43.21	28.78	37.57	47.13	34.38	36.28	45.71	36.75	4.53	34.93	47.13
RF1	39.18	66.55	66.24	66.88	67.49	64.71	64.85	65.90	64.66	39.18	62.94	67.49
RF2	38.38	76.51	68.38	72.85	75.74	75.69	73.18	80.66	75.69	38.38	70.79	80.66