## Executive Summary

**Dell PowerEdge R7615**

<table>
<thead>
<tr>
<th>TPCx-AI Performance</th>
<th>Total System Cost</th>
<th>Price/Performance</th>
<th>Availability Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>425.31 AIUCpm@10</td>
<td>$48,412 USD</td>
<td>$113.83 USD/AIUCpm@10</td>
<td>February 22, 2023</td>
</tr>
</tbody>
</table>

**Framework**

- Anaconda3 4.12.0

**Operating System**

- Red Hat Enterprise Linux 8.6

**Other Software**

- N/A

**Scale Factor**

- 10

**Streams**

- 100

---

### Use Case Time (sec.) by Phase

- **Training**
- **Serving 1**
- **Serving 2**
- **Throughput (Avg)**

---

**Physical Storage / Scale Factor**

- 1,200.00

**Scale Factor / Physical Memory**

- 0.03

**Main Data Redundancy Model**

- RAID 5

---

**Servers:**

- Total Processors/Cores/Threads: 1
- 1 / 32 / 64

**Server Type**

- 1x PowerEdge R7615 (Server)

**Processors**

- 1x AMD EPYC 9374F 32-Core Processor

**Memory**

- 384 GiB

**Storage Controller**

- 2x PERC H755N 12G SAS

**Storage Device**

- 2x 240 GB M.2 SATA; 3x 3.84 TB NVMe

**Network Controller**

- 1x Broadcom NetXtreme Gigabit Ethernet 2-port
**Dell PowerEdge R7615**

**TPCx 1.0.2**

**TPC Pricing**

**2.8.0**

**Report Date**

Nov. 10, 2022

---

### Executive Summary

- **Dell PowerEdge R7615**
- **TPCx-AI 1.0.2**
- **TPC Pricing 2.8.0**
- **Report Date**
  - Nov. 10, 2022

---

**Description** | **Part Number** | **Source** | **List Price** | **Qty** | **Extended Price** | **1-Yr. Maintenance**
---|---|---|---|---|---|---
**TPCx-AI 1.0.2**

**Hardware**

- PowerEdge R7615 Server: 210-BFWV, 1, $56,625.00, 1, $56,625.00
- 2x6xU.2 G4 RAID: 321-BFE, 1, $0.00
- 82xIOBs: 379-BQIS, 1, $0.00
- Trusted Platform Module 2.0 VS: 461-AAJ, 1, $0.00
- C3-3: 3xU.2 G4 RAID: 321-BFE, 1, $0.00
- AMD EPYC 9374F 3.8GHz, 32C/64T, 256M Cache, 3200 MHz DDR5-3200G: 338-CXCD, 1, $0.00
- Standard Heatsink: 412-AASE, 1, $0.00
- Performance Optimized: 370-AAP, 1, $0.00
- 4800MT/s RDIMMs: 370-AHCL, 1, $0.00
- 32GB RDIMM, 4800MT/s Dual Rank: 370-AZGP, 1, $0.00
- Unconfigured RAID: 780-BDDS, 1, $0.00
- PERC H730P Front: 405-AAG, 1, $0.00
- 3.84TB Data Center NVMe ReadIntensive AG Drive U2 Gen4 w/ 400-BMTN: 1, $0.00
- Performance BIOS Settings: 384-BBBL, 1, $0.00
- High Performance Fan: 750-AAVT, 1, $0.00
- Dual, Hot-Plug Power Supply Redundant (1+1): 1400W, Mixed: 450-AHNG, 1, $0.00
- Jumper Card - C3/C34, 4M, 250V, 12A: North America, Guam, 492-BBDV, 1, $0.00
- Riser Config 2, 2x16 H: 2x16 LP PCIe slot: 330-BBNL, 1, $0.00
- Broadcom 5740 Dual Port 10GbE Optional OOM: 540-BXOD, 1, $0.00
- PowerEdge R7615 Motherboard: 529-BHOC, 1, $0.00
- BOSS-S2 controller card + with 2 M.2 240GB (RAID 1): 415-BCMG, 1, $0.00
- iDRAC/Enterprise 15G: 385-BBKT, 1, $0.00
- PowerEdge 2U Standard Bezel: 350-BBBP, 1, $0.00
- Keyboard and Optical Mouse, USB, Black, English: 570-AAAAV, 580-ADIC, 1, $0.00
- No Quiet Sync: 350-BBBU, 1, $0.00
- iDRAC/Legacy Password: 379-BCDG, 1, $0.00
- iDRAC Group Manager, Enabled: 379-BCQV, 1, $0.00
- Red Hat Enterprise Linux 8.6 (Otopa), kernel 4.18.0-372.9.1.el8: 605-BBFL, 1, $0.00
- No Media Required: 605-BBFF, 1, $0.00
- ReadyRails Sliding Rails: 770-BBRQ, 1, $0.00
- No Internal Optical Drive: 429-AAAL, 1, $0.00
- No Systems Documentation, NoOpenManage DVD Kit: 631-AACK, 1, $0.00
- PowerEdge R7615 Shipping: 340-CMG, 1, $0.00
- PowerEdge R7615 Ship Material: 340-CCON, 1, $0.00
- PowerEdge R7615 No CE or CCCMarking: 343-BBP, 1, $0.00
- US Order: 332-1286, 1, $0.00

**Dell 24 Monitor**

- 210-AIWG, 1, $169.99, 1, $169.99

**Software**

- Anaconda Pro 1 Subscription (1 year): 2, $10,000.00, 1, $10,000.00

**Total**

- **Total System Cost (USD):** $48,412
- **AIUCpm@10:** 425.31
- **$/AIUCpm@10:** 113.83

---

**Pricing:** 1 = Dell; 2 = Anaconda

*Discount applies to all line items where Source = 1. Discount based upon total system cost as purchased by a regular customer.*

---

**Audited by Doug Johnson, InfoSizing**

Prices used in TPC benchmarks reflect the actual prices a customer would pay for a one-time purchase of the stated Line Items. 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 Line Items. For complete details, see the pricing section of the TPC Benchmark Standard. If you find that the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.
## Executive Summary

**Dell PowerEdge R7615**

- **TPCx-AI** 1.0.2
- **TPC Pricing** 2.8.0
- **Report Date** Nov. 10, 2022

### Numerical Quantities

<table>
<thead>
<tr>
<th>AIUCpm@10</th>
<th>425.31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Factor</td>
<td>10</td>
</tr>
<tr>
<td>Streams</td>
<td>100</td>
</tr>
<tr>
<td>Kit Version</td>
<td>1.0.2</td>
</tr>
<tr>
<td>Execution Status</td>
<td>Pass</td>
</tr>
<tr>
<td>Accuracy Status</td>
<td>Pass</td>
</tr>
</tbody>
</table>

| $T_{\text{Load}}$ | 2.29 |
| $T_{\text{LD}}$   | 2.29 |
| $T_{\text{PTT}}$  | 316.80 |
| $T_{\text{PST1}}$ | 19.75 |
| $T_{\text{PST2}}$ | 19.89 |
| $T_{\text{TT}}$   | 2.74 |

### Test Times

<table>
<thead>
<tr>
<th>Test Time</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Run Start Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Overall Run End Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Overall Run Elapsed Time</td>
<td>13,742.779</td>
</tr>
<tr>
<td>Load Test Start Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Load Test End Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Load Test Elapsed Time</td>
<td>2.306</td>
</tr>
<tr>
<td>Power Training Start Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Power Training End Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Power Training Elapsed Time</td>
<td>9,328.734</td>
</tr>
<tr>
<td>Power Serving 1 Start Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Power Serving 1 End Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Power Serving 1 Elapsed Time</td>
<td>683.473</td>
</tr>
<tr>
<td>Power Serving 2 Start Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Power Serving 2 End Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Power Serving 2 Elapsed Time</td>
<td>687.680</td>
</tr>
<tr>
<td>Scoring Start Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Scoring End Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Scoring Elapsed Time</td>
<td>138.265</td>
</tr>
<tr>
<td>Throughput Start Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Throughput End Time</td>
<td>2022-10-21</td>
</tr>
<tr>
<td>Throughput Elapsed Time</td>
<td>2,748.071</td>
</tr>
</tbody>
</table>
### Numerical Quantities (continued)

**Use Case Times & Accuracy**

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Training (sec)</th>
<th>Serving 1 (sec)</th>
<th>Serving 2 (sec)</th>
<th>Throughput (avg)</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC01</td>
<td>119.995</td>
<td>10.025</td>
<td>10.043</td>
<td>38.876</td>
<td>0.000</td>
</tr>
<tr>
<td>UC02</td>
<td>2,104.383</td>
<td>8.949</td>
<td>8.920</td>
<td>46.158</td>
<td>0.310</td>
</tr>
<tr>
<td>UC03</td>
<td>113.122</td>
<td>4.405</td>
<td>4.390</td>
<td>19.191</td>
<td>3.630</td>
</tr>
<tr>
<td>UC04</td>
<td>89.595</td>
<td>12.050</td>
<td>12.288</td>
<td>54.546</td>
<td>0.707</td>
</tr>
<tr>
<td>UC05</td>
<td>974.454</td>
<td>4.489</td>
<td>4.622</td>
<td>27.744</td>
<td>0.025</td>
</tr>
<tr>
<td>UC06</td>
<td>424.760</td>
<td>144.016</td>
<td>148.551</td>
<td>435.285</td>
<td>0.548</td>
</tr>
<tr>
<td>UC08</td>
<td>4,928.427</td>
<td>396.486</td>
<td>396.099</td>
<td>1,565.763</td>
<td>0.740</td>
</tr>
<tr>
<td>UC09</td>
<td>294.112</td>
<td>75.706</td>
<td>75.508</td>
<td>290.712</td>
<td>1.000</td>
</tr>
<tr>
<td>UC10</td>
<td>253.635</td>
<td>22.987</td>
<td>22.881</td>
<td>96.265</td>
<td>0.816</td>
</tr>
</tbody>
</table>

**Use Case Serving Times (sec.)**

![Use Case Serving Times Graph](image-url)