## Cisco Data Intelligence Platform

**Availability Date**
Currently Available

**TPCx-HS Performance**
16.33<br>HSph@3TB

**Price/Performance**
$62,114.52<br>$ / HSph@3TB

**Total System Cost**
$1,014,330 USD

### System Under Test Configuration Overview

<table>
<thead>
<tr>
<th>Scale Factor</th>
<th>Hadoop Software</th>
<th>Operating System</th>
<th>Other Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Cloudera Enterprise Basic 6.3.0</td>
<td>Red Hat Enterprise Linux Server 7.6</td>
<td>n/a</td>
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</tbody>
</table>

- **16 x Cisco UCS C240 M5 Servers** (Data nodes) with:
  - 2x Intel Xeon Gold 6230 CPU
  - 384 GiB Memory
  - 24x 2.4TB 10k rpm SAS HDD
  - 2x 8 TB Intel P4510 NVMe High Perf. Value drives
  - 2x 240 GB SATA M.2 (BOOT)

- **1 x Cisco UCS C240 M5 Servers** (Name node) with:
  - 2x Intel Xeon Gold 6230 CPU
  - 384 GiB Memory
  - 24 x 1.2TB 10k rpm SAS HDD
  - 2 x 240 GB SATA M.2 (BOOT)

- **40GigE**
- **2 x Cisco UCS Fabric Interconnects 6332 (32x40G)**

### Physical Storage/Scale Factor: 404.85

### Scale Factor/Physical Memory: 0.47

**Servers:**
- Total Processors/Cores/Threads: 17 (1x Cisco UCS C240 M5; 16x Cisco UCS C240 M5)
- 34/680/1,360

**Server Configuration:**
- Processors: 1x Cisco UCS C240 M5: 2x Intel(R) Xeon(R) Gold 6230 384 GiB
- Memory: 1x 12G SAS Modular RAID 24x 1.2TB 10k rpm SAS HDD
- Storage Controller: VIC 1387 Dual Port 40Gb
- Storage Device: 2x240GB SATA M.2
- Network: 2x CIcSO UCS Fabric Interconnect 6332 (32x40G)

**Connectivity:**
- Total Rack Units: (17 x UCS C240 M5) + (2 x FI 6332) = (17x2) + (2x1) = 36RU
## EXECUTIVE SUMMARY

Cisco Data Intelligence Platform

TPCx-HS 2.0.3

TPC Pricing 2.5.0

Report Date Dec. 13, 2019

### Description | Part Number | Source | Unit Price | Qty | Extended Price | 3 Yr. Maint. Price
--- | --- | --- | --- | --- | --- | ---
**Hardware**
UCS C240 M5 24 SFF + 2 rear drives w/o CPU,mem, HD, PCIe, PS | UCSC-C240-M5SX | 1 | $4,939.00 | 16 | $79,024.00 |
SNTC 24X7X4OS UCS C240 M5 24 SFF + 2 rear drives w/o CPU,mem, HD, PCIe, PS | CON-OSP-C240M5SX | 1 | $3,102.75 | 17 | $52,746.75 |
Riser 1 incl 3 PCIe slots (x8, x16, x8); slot 3 req CPU2 | UCSC-PCI-1-C240M5 | 1 | $199.00 | 16 | $3,184.00 |
Cisco VIC 1387 Dual Port 40Gb QSFP CNA MLOM | UCSC-MLOM-C40Q-O3 | 1 | $2,192.00 | 16 | $35,072.00 |
240GB SATA M.2 | UCS-M2-240GB | 1 | $353.00 | 32 | $11,744.00 |
Ball Bearing Rail Kit for C220 & C240 M4 & M5 rack servers | UCSC-RAILB-M4 | 1 | $220.00 | 16 | $3,520.00 |
IMC SW (Recommended) latest release for C-Series Servers. | CIMC-LATEST | 1 | $0.00 | 16 | $0.00 |
Big Data and Analytics Platform (Hadoop/IoT/ITOA/AI/ML) | UCS-SID-INFR-BD | 1 | $0.00 | 16 | $0.00 |
Big Data and Analytics (Hadoop/IoT/ITOA) | UCS-SID-WKL-BD | 1 | $0.00 | 16 | $0.00 |
Mini Storage carrier for M.2 SATA/NVME (holds up to 2) | UCS-MSTOR-M2 | 1 | $0.00 | 16 | $0.00 |
Super Cap cable for UCSC-RAID-M5HD | CBL-SC-MR12GM5P | 1 | $0.00 | 16 | $0.00 |
Super Cap for UCSC-RAID-M5, UCSC-MRAID1GB-KIT | UCSC-SCAP-M5 | 1 | $0.00 | 16 | $0.00 |
Cisco 12G Modular RAID controller with 4GB cache | UCSC-RAID-M5HD | 1 | $2,900.00 | 16 | $46,400.00 |
2.4 TB 12G SAS 10K RPM SFF HDD (4K) | UCS-HD24TB10K4KN | 1 | $2,065.00 | 352 | $726,880.00 |
32GB DDR4-2933-MHz RDIMM/2Rx4/1.2v | UCS-MR-X32G2RT-H | 1 | $2,043.00 | 192 | $392,256.00 |
C240 Rear UCS-RAID-M5HD SAS cbl (1) incl fan, bkpln | UCSC-PCI-1-C240M5 | 1 | $199.00 | 16 | $3,184.00 |
Cisco UCS 1050W AC Power Supply for Rack Server | UCSC-PSU1-1050W | 1 | $729.00 | 32 | $23,328.00 |
Power Cord, 125VAC 13A NEMA 5-15 Plug, North America | CAB-9K12A-NA | 1 | $0.00 | 32 | $0.00 |
Heat sink for UCS C240 M5 rack servers 150W CPUs & below | UCSC-HS-C240M5 | 1 | $0.00 | 32 | $0.00 |
Intel 6230 2.1GHz/125W 20C/27.50MB DCP DDR4 2933 MHz | UCS-SP-FI6332 | 1 | $24,400.00 | 2 | $48,800.00 |
ONSITE 24X7X4 (Not sold standalone) UCS 6332 1RU FI/12 QSFP+ | CON-OSP-FPIF6332 | 1 | $7,011.90 | 2 | $14,023.80 |
UCS 6332/ 6454 Power Supply/100-240VAC | UCS-PSU-6332-AC | 1 | $0.00 | 4 | $0.00 |
Power Cord, 125VAC 13A NEMA 5-15 Plug, North America | CAB-9K12A-NA | 1 | $0.00 | 4 | $0.00 |
40GBASE-CR4 Passive Copper Cable, 3m | QSF-P-40G-CR4 | 1 | $0.00 | 16 | $0.00 |
QSFP40G BiDi Short-reach Transceiver | QSFP-40G-SR-BD | 1 | $0.00 | 8 | $0.00 |
UCS Manager v3.2 | N10-MGMT015 | 1 | $0.00 | 2 | $0.00 |
UCS 6332/ 6454 Fan Module | UCS-FAN-6332 | 1 | $0.00 | 8 | $0.00 |
UCS 6332/ 6454 Chassis Accessory Kit | UCS-ACC-6332 | 1 | $0.00 | 2 | $0.00 |
Heat sink for UCS C240 M5 rack servers 150W CPUs & below | UCSC-HS-C240M5 | 1 | $0.00 | 32 | $208,000.00 |
Cisco R42612 standard rack, w/ side panels | RACK2-UCS2 | 1 | $6,241.00 | 1 | $6,241.00 |
SNTC 8X5XNBD, Cisco R42612 standard rack, w/ side panels | CON-SNT-RCK2UCS2 | 1 | $300.00 | 1 | $300.00 |
UCS 6332/ 6454 PSU/100-240VAC | UCS-PSU-6332-AC | 1 | $0.00 | 4 | $0.00 |
Power Cord, 125VAC 13A NEMA 5-15 Plug, North America | CAB-9K12A-NA | 1 | $0.00 | 4 | $0.00 |
40GBASE-CR4 Passive Copper Cable, 3m | QSFP-H40G-CU3M | 1 | $0.00 | 16 | $0.00 |
Power Cord, 125VAC 13A NEMA 5-15 Plug, North America | CAB-9K12A-NA | 1 | $0.00 | 4 | $0.00 |
40GBASE-CR4 Passive Copper Cable, 3m | QSFP-H40G-CU3M | 1 | $0.00 | 16 | $0.00 |
Cisco 3rd Gen FI Per port License to connect C-direct only | UCS-LIC-6300-40GC= | 1 | $1,388.00 | 20 | $27,760.00 |

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Report Date December 13, 2019

EXECUTIVE SUMMARY

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TPCx-HS 2.0.3

Cisco Data Intelligence Platform

December 13, 2019

The document contains a table of hardware and software components listed with their prices, quantities, and extended prices. It also includes notes on pricing and discounts. The table begins with the description of components and continues from the previous page.
## Numerical Quantities

### Performance Run – Run 1

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<th>Value</th>
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Run Report for Performance Run – Run 1
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TPCx-HS Performance Metric (HSph@SF) Report

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TPCx-HS Performance Metric (HSph@SF): 16.3398

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Run Report for Repeatability Run – Run 2
============================================================================================================
TPCx-HS Performance Metric (HSph@SF) Report

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TPCx-HS Performance Metric (HSph@SF): 16.4203

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Revision History

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<tbody>
<tr>
<td>December 13, 2019</td>
<td>First</td>
<td>Initial Publication</td>
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