



711.07867 REV 05 – Rio Camera with In-Situ PC System

Manufacturer: Dell
Model: PowerEdge T640

Base Unit:	PowerEdge T640 tower server (210-AMBC, 329-BDMT, 461-AADZ, 321-BCXI, 350-BBLM, 770-BBCR, 384-BBSO, 384-BBBL, 350-BBBW, 800-BBDM)
Processor:	(2) Intel Xeon Gold 6126, 12 core, 2.6 GHz, 19.25Mb L3, 10.4 GT/s, 125 W, Turbo (338-BLLY, 374-BBNT, 412-AAJW)
Memory:	256 Gb RAM, 2667 MHz, Dual rank, x4 data width, performance optimized; (8) 32 Gb RDIMMs (370-ADNU, 370-ADNF, 370-AAIP)
Video Card:	(1) nVidia Quadro P1000, 4 Gb GDDR5, 640 CUDA cores, PCIe v3 x16, 47 W max power consumption, with (4) mDP v1.4 connectors (PNY VCQP1000-PB)
Monitor:	(1) Dell 32" Widescreen flat panel display, UP3216Q, 3840x2160, HDMI & mini-DP & DP connectors, 6 ft length DP/mDP cable (210-AFLN, 806-3509, 806-3522)
Hard Drives:	(1) 1.2 Tb, 2.5" SAS, 10,000 rpm, 12 Gb/s (400-AUTI) (8) 1000 Gb, 2.5" Serial-ATA Solid State (Samsung 860 EVO MZ-76E1T0BW) (8) 2.5 SFF SAS SATA Drive Tray Caddy for Dell (Wali Electric WL-2.5-1-1)
HD RAID:	RAID 0 (from the 8 x 1000 Gb SSD's), (1) 7.4 Tb logical drive for Capture Data
HD Controller:	(1) PERC H730P (LSI SAS 3108, PowerPC 476 dual-core ROC), 8 ports, 12 Gb/s SAS, 6 Gb/s SATA, 2 Gb DDR3 SDRAM non-volatile cache, PCIe v3 x8 (405-AANW)
Optical Drive:	(1) DVD+/-RW, SATA, 8x (429-AAQL)
Power Supply:	(1) 1100 W Hot Plug (450-ADWL, 450-AALV)
Operating System:	Windows Server 2016 Standard Edition, 64-Bit, English (634-BILD, 634-BILE)
Energy Efficiency:	Energy Star (387-BBMK)
Network Adapters:	(1) Broadcom 57416 Dual Port, 10/1GbE, BASE-T, PCIe v3 x8 (540-BBUI) (1) On-Board LOM, 10GbE, Dual Ports (542-BBCT)
Keyboard:	(1) Logitech Illuminated Keyboard K740, wired USB (920-000914)
Mouse:	(1) Logitech Corded Mouse M500, wired USB (910-001204)
Expansion Slots:	1 PCIe x16, Gen 3, can accommodate double width card, CPU 1 2 PCIe x8, Gen 3, wired as x4, CPU 1 3 PCIe x16, Gen 3, CPU 1 (occupied by Video card) 4 PCIe x8, Gen 3, CPU 2 (occupied by Network card) 5 PCIe x8, Gen 3, wired as x4, CPU 2 6 PCIe x16, Gen 3, CPU 2 7 PCIe x8, Gen 3, CPU 2 8 PCIe x16, Gen 3, CPU 2
Tower I/O Ports:	Front: (1) USB 3.0, (1) USB 2.0, (1) iDRAC Direct (Micro-AB USB) Rear: (4) USB 3.0, (2) USB 2.0, (1) VGA, (2) NIC, (1) iDRAC9, (1) Serial
Service:	3 Year ProSupport and NBD On-site Service (815-5143, 815-5150, 815-5162, 989-3439)
Documentation:	Electronic System Documentation & OpenManage DVD kit (430-XYLY)
Embedded Systems Management:	iDRAC9 Express (385-BBKS, 379-BCQY, 379-BCQW, 379-BCSG)

Notes:

- Items in **blue** text are NOT part of the PowerEdge configuration that can be ordered if purchased directly from Dell.
- GMS software version 3.2.2 (or newer) is required for support of acquisition equipment in Windows Server 2016.
- If the specific hardware device configuration requires more expansion slots (or a different type) than what is available on the motherboard, an Expansion Enclosure System will also need to be purchased:

PCI Express to 2 PCI & 2 PCIe Expansion Enclosure System – Full Length
Gatan p/n#101780 (StarTech #PEX2PCIE4L)

- If the monitor, keyboard and mouse need to be located farther from the computer case than would be permitted by standard 2m cabling provided by Dell, an optional 10m Ultra HD monitor cable bundle may be purchased (included if computer purchased from Gatan):

(10m) DP 1.2/1.3 Active Optical cable, (10m) USB 2.0 A male to B male Active cable, (12.2m) 250V power cord
Gatan p/n# 711.27000