COMPACT CHASSIS /
HIGH-PERFORMANCE / BUILT FOR
THE EDGE / BACKPACKABLE



Tracewell T-XR8000-1

(single slot “mini” chassis)

BASED ON: The Dell Technologies PowerEdge XR8000 is the company’s most compact, durable and powerful edge server to date. Built to deliver scalable, high-performance computing specifically for edge environments, the XR8000 Series is tested to comply with MIL-STD and NEBS standards and designed to operate in rugged, harsh environments.

USE CASE: Tracewell Systems XR8000 Extensions make it possible to do more with Dell Technologies. The T-XR8000-1 is ideal for customers looking for a high-performance, on-the-go compute platform optimized for the edge. Standard Dell compute sleds insert into the “mini” chassis (it is “pluggable”) making the perfect platform for customers that want to extend their Dell XR8000-based applications on a common hardware footprint across their data center and edge operations.

SYSTEM:
(CHASSIS ONLY; NO TRANSIT CASE)
1.9"H x 10.1"W x 18.3"D

FORM FACTOR HIGHLIGHTS

Compact, high-performance platform delivers data center capabilities to edge environments.

Single-slot chassis supports standard Dell PowerEdge compute sleds (1U).

Size and weight make it ideal for “carry with” (backpackable) or “carry on” (Airline Transportation Association compliant) appllications.

Part of a growing family of Dell PowerEdge XR8000 based edge platforms.

Benefits

DELL TECHNOLOGIES

The Dell PowerEdge XR8000 is purpose built to deliver high-performance computing in edge environments. The multi-node server comes in 1U or 2U form factors and a chassis and sled architecture perfect for retail, manufacturing, telecommunications and defense organizations.

TRACEWELL PLATFORMS

All the benefits of the Dell PowerEdge XR8000 delivered in a compact (“mini”) one-slot chassis that makes it possible to plug in standard Dell compute sleds. Portable chassis delivers a high-performance platform for commercial, OEM and defense organizations.

DELL+TRACEWELL

Electrically identical to standard Dell products. “Plug and play” components between Dell products and Tracewell platforms. Order through Dell (Dell part number) and eligible for Dell warranty, service, support and secure supply chain.

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The Tracewell T-XR8000-1 (single slot “mini” chassis) Specifications Summary

The Tracewell T-XR8000-1 (single slot “mini” chassis) accepts standard Dell hardware configurations.

STANDARD DELL POWEREDGE XR8000 PRODUCT CONFIGURATIONS

PROCESSOR TYPE	Dell XR8610t (1U); 1x 4th Generation Intel Xeon Scalable and Edge-Enhanced processors with up to 32 cores; or 1x 5th Generation Intel Xeon Scalable and Edge-Enhanced processors with up to 16 cores.
MEMORY ARCHITECTURE	Dell XR8610t (1U); Up to 8x DDR5 DIMM slots, supports RDIMM only, up to 768 GB, up to 5600 MT/s.
STORAGE	Dell XR8610t (1U); Up to three NVMe non-hot swappable M.2 drives; BOSS N1 with 2 x 2280 NVMe SSDs; Single M.2 riser with 1 x 2280 M.2 SSD; Dual M.2 riser (non-RAID) with 2 x M.2 2280 or 22110 M.2 SSDs.
VIDEO	Dell XR8610t; Integrated Matrox G200 graphics controller embedded in the iDRAC (BMC) chip with 16 MB of video frame buffer.
PCIe SLOTS	Dell XR8610t (1U); Up to 1 PCIe slot, FHHL, x16 PCIe (Gen 5).
NETWORK	Dell XR8610t (1U); 2 x 25 GbE SFP28 LOM ports (optional). Note: Additional networking can be supported using PCIe add-in cards
GPU	Dell XR8610t (1U); up to 1x NVIDIA L4 GPU; restrictions may apply, contact Dell for details.
SYSTEM MANAGEMENT	Dell XR8610t; iDRAC9, iDRAC Direct, iDRAC RESTful API with Redfish, iDRAC Service Module.
ACCESSIBLE I/O	Dell XR8610t (1U) per sled; 1 x iDRAC Direct (Micro-AB USB) port, 1 x USB-A 3.0, 1 x Micro USB serial port, 1 x Mini-DisplayPort, 1 x RJ45 iDRAC9 ethernet port, 1 x RJ45 Alert/Dry contact input connector.
POWER SUPPLY	Up to 1x power supplies supported; available 1800W/1400W Mixed Mode AC, or 1400W/1100W/800W DC. High-line AC (or 240VDC mixed mode) operation up to 1800W; Low-line AC operation up to 1400W; -48VDC operation up to 1400W. Input voltage: 100-240VAC or 240VDC (nominal, mixed mode); -48 to -60VDC. Maximum current: 12A or 12-8A (AC input), 6.6A to 33.5A (DC input).
COOLING	Dell XR8610t (1U); up to 4 standard cable fans (per sled) with reverse air flow.
ENVIRONMENTAL	* Operating temperature: Dell XR8610t (1U): 10°C to 35°C (50°F to 95°F) with extended options to -5°C to 55°C (23°F to 131°F), configuration dependent. Storage temperature: -40°C to 65°C (-40°F to 149°F). * Note: Configuration restrictions apply, see Dell documentation for details.

The Tracewell T-XR8000-1 (single slot “mini” chassis) Specifications Summary

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TRACEWELL SYSTEMS PRODUCT CONFIGURATIONS

CHASSIS / CONSTRUCTION	Multi-slot, bonded aluminum low-mass chassis for rigidity with minimum weight.
CHASSIS SLED SLOTS	1-Sled chassis supports; 1 x XR8610t (1U) sled; also supports Tracewell T-XR8610-S 10-port switch sled.
DIMENSIONS	T-XR8000 1-slot chassis (no transit case): 18.3"L x 10.1"W x 1.9"H (inc. feet). * T-XR8000 1-slot chassis in Airline Transportation Association (ATA) transit case: 22.0"L x 14.0"W x 9.0"H. * T-XR8000 1-slot chassis in 4U tactical (“ship-to”) transit case: 29.2"L (inc. handles) x 15.3"W x 10.6"H. * T-XR8000 1-slot chassis in 5U tactical (“ship-to”) transit case: 29.2"L (inc. handles) x 15.3"W x 12.3"H. * Note: 1-slot chassis are typically combined with other assets within these cases.
INSTALLATION & OPTIONS	ATA “carry-on” transit case (optional). Tactical 4U and 5U tactical (“ship-to”) transit case (optional). Wheel kit with retractable tote handle (standard on ATA case, optional on 4U/5U tactical transit case). Unit may be operated within a transit case or stand-alone/benchtop. Additional options include network switches, extended storage, UPS back up, encryption devices and other third-part components. Contact Tracewell for more details.

Above specifications are derived from the standard Dell XR8000 product.

ABOUT TRACEWELL SYSTEMS

For more than 50 years Tracewell has enabled the nation’s largest military and commercial organizations to deliver powerful and reliable computing solutions in environments where size, weight, power and other constraints present challenges that cannot be met by standard computing systems. Tracewell Systems have been recognized by the top names in the defense and technology sectors for their commitment to Trusted Innovation – a process where the company solves previously impossible, sensitive, mission-critical platform challenges through customer solution design, engineering and manufacturing, all under one roof. More information: www.tracewell.com.

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