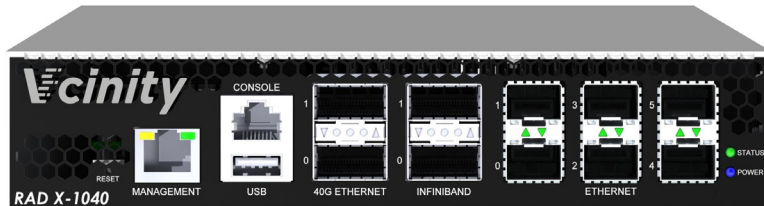


Radical X-1040

Enabling a truly location independent enterprise infrastructure

BENEFITS

- Unprecedented Reach:**
 Extends high-speed local fabrics over global – and even satellite – distances
- Rapid Data Transfer:**
 Enables predictable, economical and lossless movement of data substantially faster than normal methods
- High Availability:**
 Offers carrier-grade redundancy that supports continuous operations
- Cost Savings:**
 Maximizes use of your existing infrastructure, leading to lower operational costs
- High Scalability:**
 Supports scalable interfaces, from Mbps to 40Gbps, and standard routing protocols for multi-point configurations



Major challenges created by astronomical growth of distributed data – global reach, capacity scalability, movement and access of large data and timely frequent delivery/access of the same – can be solved by creating a truly location-independent infrastructure. Vcinity’s Radical X™ family provides low latency, high performance connectivity – allowing businesses to take command of geographically dispersed compute and storage resources, with the immediacy of local access. Purpose-built for high performance data environments, RAD X-1040 creates an infrastructure that’s truly location independent by leveraging patented Global Fabric Extension technology. Its compact form factor allows it to be rack-mounted or even used on a desktop making it especially suitable for remote locations such as satellite offices, oil rigs, cruise ships, etc. It supports a high density of speed-selectable interfaces delivering a scalable and power efficient system that is complimented by an open software architecture with standard interfaces/protocols for data, control and management functions.

| Feature | Description / Benefit |
|--|---|
| High interface density | 250Gbps interface density in a compact 1 RU form factor |
| Switching capacity | 120Gbps non-blocking switching |
| Speed-selectable interfaces | From Mbps to 40Gbps terrestrial and satellite connections |
| ANY MAN/WAN Service | Point-to-point/point-to-multipoint (E-Line/E-LAN) full-rate or partial rate Ethernet service, layer 2 Virtual Private Network (L2VPN) service, MPLS-TE service, dark fiber |
| Concurrent, multiple LAN fabrics | 1/10/40G RoCE (RDMA over Converged Ethernet) and FDR InfiniBand interfaces aggregating concurrently to a single network service |
| Carrier grade redundancy | Field-replaceable and redundant power supplies/fan trays result in high availability and continuous operations |
| Enhanced buffer architecture | <ul style="list-style-type: none"> Deep buffers – unprecedented fabric reach (e.g., RTT 2500ms @ 10Gbps, 625ms @40Gbps) Dynamic allocation of buffers for policy-driven flows – on-demand configurable data plane |
| Fabric routing | Standard routing protocol for connection of geo-diverse locations over topology-agnostic multi-point network configurations |
| Open control and management interfaces | SNMP v2/3, NETCONF, REST API, HTTPS, SSH, CLI (console) |
| In flight encryption | AES256 ¹ from Vcinity™, MACsec |

¹Governed by Export Administration Regulation under ECCN 5D002

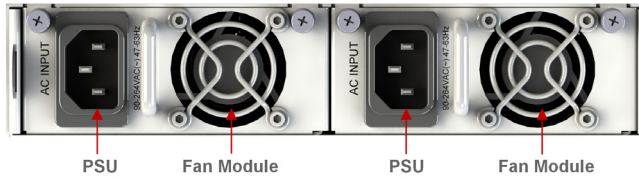
SPECIFICATIONS

Systems Overview

| | |
|----------------------|---|
| Switching Interface | 120Gbps non-blocking switching capacity 250Gbps interface capacity with pluggable transceivers |
| Control Fabric Reach | Single integrated system controller Round-trip time (RTT) of 2500ms @10Gbps, 625ms @ 40G |

Chassis

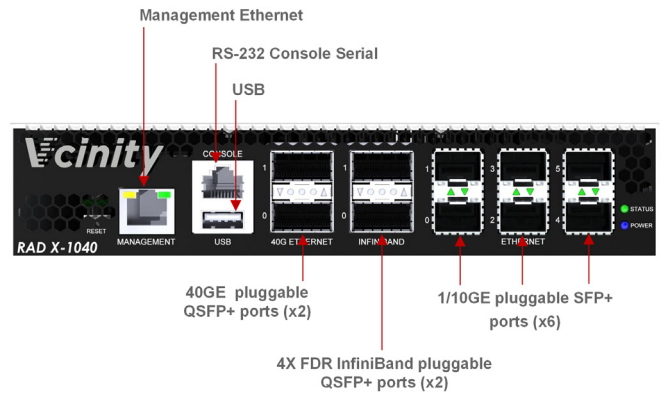
| | |
|-------------------|---|
| Form Factor | 1U (1/2 width), 19 in. front rackmount, or two units per 1RU with rear rackmount kit for use with four post racks, or desktop use |
| Dimensions | 1.63 in. (H) x 7.84 in. (W) x 18.67 in. (L) (4.14 cm x 19.91 cm x 47.42 cm) |
| Ventilation | Negative pressure system with front-to-back airflow |
| Acoustics | Intelligent, speed-controlled fans for low-noise operation |
| Indicators | AC power input, system status, and link/activity LEDs |
| High Availability | Redundant, hot-swappable AC power supply/fan assembly |
| Warranty | 1 year for hardware |



Management and Monitoring

| | |
|----------------------|--|
| Ethernet: | RJ45 (Full Duplex 10/100/1000Base-T w/auto MDI-X) |
| Serial: | RJ45 (RS-232) |
| Protocols: | HTTP/HTTPS, Secure Shell (SSH) |
| User Interface: | Web-based Graphical User Interface - GUI (HTTPS), Command Line Interface - CLI (Console and SSH) |
| User Authentication: | Supports multiple user accounts and privilege levels, LDAP |
| Remote Monitoring: | SNMP (v2/3) managed object support, Syslog |
| Configuration: | Plaintext file format with backup and restore capabilities, NETCONF, SNMP |
| Software Upgrades: | Web-based image upload or URL-based image download |

Interfaces



Power and Environmental

| | |
|-------------------|---|
| Power Input | 90-264 VAC (47-63Hz), auto-voltage sensing |
| Power Supplies | 2 x 225 Watts, dual AC input |
| Power Consumption | <200 Watts |
| Temperature | Operating: 32°F to 104°F (0°C to 40°C) Storage: -40°F to 158°F (-40°C to 70°C) |
| Humidity | Operating: 10% to 85% RH, non-condensing Storage: 5% to 95% RH, non-condensing |

The RAD X-1040 supports the following interfaces:

- Two 4X FDR InfiniBand QSFP+ ports
- Two 40GE QSFP+ ports
- Six 1/10GE SFP+ ports
- One 10/100/1000Base-T Ethernet management port
- One serial RS-232 console port
- One USB port



Some features listed in the specifications may be under development. ©Vcinity, Inc. 2018. All Rights Reserved. Vcinity, Inc., the Vcinity logo, Radical X, Ultimate X, Command X, Access X, Sync X, and Ultimate Access are trademarks and/or registered trademarks of Vcinity, Inc. Any other trademarks are the property of their respective owners. Doc ID: 16-0206-001 Rev. G 10/26/18