

M1601P

10Gb Ethernet Pass Through Module KR

The PhyX[®]-based M1601P 10GigE Pass Through Module KR for Dell's PowerEdge M-Series chassis provides high bandwidth, low latency non-blocking connectivity for blade servers individually connecting them to external Ethernet ports.

The Pass Through Module KR delivers up to 16 internal auto-negotiating 10Gb KR backplane ports and up to 16 SFP+ 10Gb external Ethernet ports in one I/O module. Each server facing port has its own dedicated external port.

Sustained Network Performance

The M1601P offers dedicated connectivity at 10Gb/s between server blades and external Ethernet ports which in turn can connect to standard 10GigE or storage equipment. 10Gb/s of bandwidth is available to each server node regardless of the traffic on any other port. The M1601P Pass Through Module KR is ideal for those customers that require direct 10Gb/s connection between each server blade in the enclosure and an external network device such as a switch, router or hub making use of existing switching capacity within a data center.

Ease of Use and Management

The M1601P is externally managed by the CPU module in the PowerEdge M-Series chassis. All status and maintenance information is collected over a RS232 link that runs over the backplane. The M1601P designed to fit any of the Dell M-series chassis I/O bays based on desired system configuration.

Up to six 10Gb Ethernet Pass Through-K modules (two in Fabric A,B and C) supported per M1000e chassis. Redundant configurations can be supported by installing two Pass Through Modules per chassis. Support for hot-swap allows removal and insertion of the M1601P while the chassis is powered on.

Mellanox Advantage

Mellanox is the leading supplier of industry standard InfiniBand adapters and switch products. Our products have been deployed in clusters scaling to thousands of nodes and are being deployed end-to-end in data centers and Top500 systems around the world.



M1601P 10GigE Pass-Through K

HIGHLIGHTS

BENEFITS

- Provides direct one-to-one external to internal Ethernet ports
- Offers high bandwidth connectivity at 10Gb/s for each server blade
- Dedicated & isolated 10GbE LAN connection from each blade within the enclosure
- Low latency access for each server blade
- 32 Ethernet ports; 16 internal (server) and 16 external (LAN) ports
- Reliable connectivity, low power and easy to deploy and use



Third party information brought
to you courtesy of Dell.

HARDWARE

ETHERNET PASS THROUGH MODULE

- 32 ports (16 internal, 16 external)
- up to 10Gb/s per port
- One-to-one connectivity from blades to external ports
- Latency w/o FEC 290/90 ns
- Support for redundant pass through modules
- Support for hot-swap

ETHERNET

- IEEE 802.3ae 10Gb/s
- IEEE 802ap 10Gb/s
 - Forward Error Correction (FEC)
 - KR auto-negotiation
- Support for jumbo frames up to 9K

MANAGEMENT

- RS232 port over the backplane
- Management port connects to Chassis Management Console (CMC)

CONNECTORS AND CABLING

- 16 10Gb/s SFP+ connectors
- Supports TwinAX, SR and LR optical cables

INDICATORS

- Per port status LEDs: Link, Activity
- System status LEDs: System status, power

DIMENSIONS (H X W X D)

- 1.14" x 9.72" x 11.22"

MAXIMUM POWER CONSUMPTION

- 41W passive cables, 57W active cables
 - Power through connector: 1W per port

COMPLIANCE

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SAFETY

- UL60950 C-UL to CAN/CSA 22 2 No.60950-1
- TUV/GS to EN 60950-1, Amendment A1-A4, A11 CB-IEC60950-1, all country deviations

EMC (EMISSIONS)

- CC 47CFR Part 15 Class A
- EN 55022 Class A
- ICES-003 Class A
- VCCI Class A
- AS/NZS CISPR 22 Class A
- CISPR 22 Class A
- EN 55024 EN 300386
- CE

ENVIRONMENTAL

- EU: IEC 60068-2-64: Random Vibration
- EU: IEC 60068-2-29: Shocks, Type I / II
- EU: IEC 60068-2-32: Fall Test

OPERATING CONDITIONS

- Operating temperature: 0 to 40° C
- Humidity: 10-90% non-condensing
- Air flow: 3CFM @30°C, 9CFM @40°C ambient temperature



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