

**PRODUCT BRIEF**

Omni-Path Express 2 x 100 Gb/s to 2 x 100 GbE, 2 x 100 Gb/s EDR, or 1 x 200 Gb/s HDR Gateway for Compute and Storage Infrastructures



# CORNELIS™ OMNI-PATH EXPRESS™ GATEWAYS

## CN-100GWY

### Cornelis Networks provides the industry's leading Gateways.



Cornelis Omni-Path Express Gateways are part of an end-to-end product family providing purpose-built fabrics for High Performance Computing (HPC), High Performance Data Analytics (HPDA), and Artificial Intelligence (AI) that deliver high performance with breakthrough value. The Cornelis Omni-Path Express Gateways leverage investments in existing fabric systems and network resources requiring access to a Cornelis Networks Omni-Path Express fabric.

#### Cornelis Omni-Path Express scale-out interconnect

Unprecedented demands on the scale-out interconnect are being driven by advances in artificial intelligence, high performance data analytics, and traditional modeling and simulation environments, coupled with extremely capable processing and storage infrastructures.

Cornelis Omni-Path Express is the next generation of high performance fabrics, a proven hardware foundation combined with the OpenFabrics Interfaces (OFI) framework, that delivers the industry's lowest latency, highest message rate, and best collectives performance, all at the industry's lowest CPU utilization.

#### Cornelis Omni-Path Express to Ethernet or InfiniBand\* Gateway Solutions

Cornelis Omni-Path Express Gateways offer multiple connectivity options to enable bridging to Ethernet networks

and InfiniBand fabrics. Storage systems deployed with either interface can now be easily connected to an Omni-Path Express fabric with a cost-effective turnkey appliance. Other Ethernet- or InfiniBand-enabled systems can also leverage this capability to connect to Omni-Path Express fabrics through the Gateway.

The Cornelis Omni-Path Express Gateway Ethernet-connected solutions contain a 2 x 100 GbE interface enabling forwarding of IP traffic using standard IP protocols to and from two Omni-Path Express Host Fabric Adapter (HFA), supporting up to 200 Gb/s speeds. LNET protocols are also supported by the Ethernet-connected Gateway solutions..

The Cornelis Omni-Path Express Gateway InfiniBand-connected solutions are offered with either a 2 x 100 Gb/s EDR interface or a 1 x 200 Gb/s HDR interface enabling forwarding of IP traffic using standard

IP protocols to and from two Omni-Path Express HFAs, supporting up to 200 Gb/s speeds. LNET is also supported by the InfiniBand-connected Gateway solutions.

Fault tolerance is readily configurable on Cornelis Omni-Path Express Gateways employing IP protocols with the capability to enable port-to-port and Gateway-to-Gateway failover. Failover and high availability are implemented using standard network protocols across multiple IP gateways to suit system requirements. The LNET protocol is also readily configurable for fault tolerance and load sharing.

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### HIGHLIGHTS

#### Benefits

- High performance Omni-Path Express to Ethernet connectivity
- High performance Omni-Path Express to InfiniBand connectivity
- Support for standard IP and LNET protocols
- Standard configurable High Availability and Failover

#### Key Features

- Standard 1U chassis
- 200 Gb/s solution
- 2 Omni-Path Express HFA 100 Gb/s

#### Three Interface Options

- 2 x 100 GbE
- 2 x EDR
- 1 x HDR

Specifications	
Interface Types	Two Omni-Path Express HFAs, single-port QSFP28 Ethernet 2 x 100 GbE, dual-port QSFP28 InfiniBand 2 x EDR, dual-port QSFP28 InfiniBand 1 x HDR, single-port QSFP56
Chassis Dimensions (w x h x d)	19" rack mountable, 1U chassis (437 mm x 43 mm x 650 mm)
Weight	2 x 100 GbE: 10.787 kg, 2 x EDR: 10.8 kg, 1 x HDR: 10.8 kg
Power (Max)	500 W
Input Range	100-240 VAC 50-60 HZ

Omni-Path Express to	Item Name	Item Number	Item Description
Ethernet (2 x 100 GbE)	100GWYE2G02	99AJ6F	Cornelis Omni-Path Express 200 Gb/s Ethernet Gateway
InfiniBand EDR (2 x EDR)	100GWYBEB02	99AJ7P	Cornelis Omni-Path Express 200 Gb/s InfiniBand EDR Gateway
InfiniBand HDR (1 x HDR)	100GWYBHD02	99AJ6C	Cornelis Omni-Path Express 200 Gb/s InfiniBand HDR Gateway

#### Safety

CSA/EN/IEC/UL 62368-1 Compliant, UL or CSA Listed (USA and Canada)

#### Operating Conditions

**Temperature** Operating: 10°C to 35°C (50°F to 95°F)  
Storage: -40°C to 60°C (-40°F to 140°F)

**Humidity** Operating: 8% to 90% (non-condensing)  
Storage: 5% to 95% (non-condensing)

#### Emissions/Immunity

**US/Canada** FCC Part 15, Subpart B, Class A, ICES-3(A)/NMB-3(A)

**Europe** EN55032 Class A, EN55035

**Japan** VCCI, Class A

**Korea** RRA/KC (KN32, KN35), Class A

**Taiwan** BSMI (CNS 13438), Class A

#### Environmental

**RoHS** Directive 2011/65/EU

**REACH** (EC) No 1907/2006

Discover the future of high performance fabrics  
[www.cornelisnetworks.com](http://www.cornelisnetworks.com)



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