



Understanding Cisco NCS 1002

Cisco NCS 1002 is a 2Tbps muxponder that addresses the growing bandwidth needs of data center DWDM applications. The muxponder is 2 RU. It provides dense, low power, and cost-optimized DWDM transport for 10G, 40G, and 100G clients. The trunk ports can operate at 100G, 200G, and 250G traffic. NCS 1002 is ROHS6 compliant.

NCS 1002 has four independent slices. A slice is a group of client and trunk ports operating homogeneously. Each slice contains five QSFP+/QFSP28 client optical ports and two CFP2 DWDM trunk ports. Each slice delivers up to 500 Gbps traffic. NCS 1002 has one controller card, two Solid State Disks (SSD), 1+1 redundant 1800W AC power supply modules, and 2+1 redundant fans.

NCS 1002 delivers the following benefits:

- Supports up to 2 Tbps capacity
- Transports 100, 200, or 250Gbps per wavelength on the same platform through software provisioning
- Transports 10 GE, 40 GE, and 100 GE on the same platform through software provisioning
- Supports grid-less tuning for flex-grid dense wavelength-division multiplexing (DWDM)
- Supports different modulation formats (PM-QPSK or PM-16QAM)
- Supports 7% or 20% Soft Decision (SD) FEC for maximum optical performance
- Allows for automated installation, configuration and monitoring
- Supports machine-to-machine (M2M) APIs based on YANG models for ease of configuration
- Supports a telemetry agent for a pub-sub model of device monitoring

