# **Digital coherent optics** in today's 400G+ world



What is coherent optics?

At its most basic, coherent optical technology utilizes low-cost standard optics transmitting 400G Ethernet over 120 km links using DWDM and higher modulation schemes such as Quadrature Amplitude Modulation (e.g., 8QAM and 16QAM). Coherent optics are available in QSFP-DD and OSFP form factors—and already replacing coherent line cards in the field!

**COHERENT LINE CARD** 

**COHERENT OPTICS** 





400G Ethernet support up to 120 km

### Why?

The industry needs standard DWDM technology in a smaller footprint to transport high-bandwidth interconnections.

What are the advantages of pluggable coherent optics?



#### Lower cost



Pluggable coherent optics promise improved cost efficiencies.

# Reduced network complexity



Simplified network architecture via a smaller footprint and reduced power consumption.

### Multivendor interoperability



Standard parameters for coherent optics are shared by all vendors.



### Longer reach



With a reach of up to 120 km, coherent optics are the most powerful high-speed transceivers in the industry.

## Key use case: longhaul point-to-point interconnections



Coherent optics enable direct connections between data centers and carriers, with less infrastructure.



All these key testing parameters are covered with EXFO's easy-to-use, flexible FTBx-88460 test solution. Reach out to our experts today at EXFO.com