

We work with leading photonics developers and manufacturers, building test solutions that deliver a **competitive edge.** 



SILICON PHOTONICS



PHOTONIC INTEGRATED CIRCUITS



CO-PACKAGED OPTICS



GENERAL PHOTONIC INSTRUMENTS



HYPER-SCALE DATA CENTERS



DISAGGREGATED NETWORKS



COHERENT OPTICAL COMMUNICATIONS





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### Quantifi Photonics specializes in the testing of silicon photonics, Co-Packaged Optics and pluggable optics for hyper-scale data centers, high-performance computing and artificial intelligence.

We offer an extensive portfolio of general-purpose photonic test solutions that can be configured to test a wide variety of photonic devices and controlled via CohesionUI<sup>TM</sup>, LabVIEW, MATLAB, or preferred programming language. We are also a leading provider of test solutions for coherent optical modulation, with test solutions to generate and characterize coherent optical modulated signals in full detail.

## The world of optical interconnects is changing rapidly. To keep pace our test solutions are designed to be:



### Test Solutions For All Production Stages

Quantifi Photonics supports the full product life cycle and key manufacturing stages of next-gen optical interconnects, such as integrated photonics and Co-Packaged Optics.





DOWNLOAD OUR LATEST

Testing Strategies for Next-Generation Optical Interconnects: Co-Packaged Optics & Integrated Photonics.



### Featured Products



Analysis Software

**VISIQ<sup>™</sup>** is designed to make coherent signal analysis and DSP optimization as simple as possible, and it works with high-performance real-time oscilloscopes from all leading manufacturers. It features an intuitive user-interface and supports O-band, C-band and L-Band coherent modulation with our IQRX coherent receivers.

### POI -1200 Series

### **Polarization Controller**

Fast and responsive (sub-second) automated polarization control for polarization dependent testing procedures. Offers three operating modes: Scan and Optimize, Manual, and Depolarize, with low insertion loss, high optical power input handling and comprehensive triggering and synchronization capabilities.

### Laser-2000 Series

### Swept Tunable Laser

Compact and cost-effective laboratory-grade swept tunable laser that can be operated as a step-tuned, swept-wavelength, or fixed-wavelength CW laser source. Offers 0.01 dB power stability, 400 nm/s high-speed scan rate, and built-in synchronization trigger inputs and outputs to use with other measurement instruments.

### **BERT-1102**

#### **Bit-Rate-Error-Tester**

The BERT-1102 is an 8-channel PPG and Error Detector for the design, characterization and manufacturing test of optical transceivers and optoelectrical components with symbol rates up to 29 GBaud/s in both NRZ and PAM4 formats.

### **O-Band IQRX**

#### **Coherent Optical Receiver**

Our high-performance. low-noise IQRX coherent modulation receiver is now available in an O-band version. Can be used with VISIQ software for O-band coherent modulation analysis and development of nextgeneration 800ZR coherent transceivers.











### INTRODUCING...

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... the brand new **coherent optical signal analysis software** for today's optical engineers.

Image: Nording DSP pipeline
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The first software platform to enable coherent signal analysis on high-performance real-time oscilloscopes from the 3 leading oscilloscope manufacturers.

Advanced features such as adaptive equalizers and correction algorithms reduce set-up time and optimize system performance.



Intuitive user-interface to increase efficiency of complex & time-consuming coherent modulation analysis.



### **General Purpose Photonic Test Solutions**



#### **Tunable Laser Source**

Versatile telecom laser sources with full tunability across C or L bands. Narrow 100 kHz line width, up to 16.5 dBm of power, optional whisper mode to disable frequency dither.



#### Super-luminescent Diode Broadband Light Source

Super-luminescent LED light source with high output power, large bandwidth and low spectral ripple and various wavelengths.



#### Fixed Wavelength Laser Source

Highly customizable DFB or FP laser sources available in a wide range of wavelengths and powers. Models support SMF, MMF and PMF.



#### Optical-to-Electrical Converter (O2E)

High bandwidth, broadband O-to-E converter. Available in a range of configurations; choose from 1 or 2 channels, AC/DC coupling & various conversion gain/operating wavelengths.



#### **Polarization Conditioner**

High-speed automated polarization control and scrambling with broad wavelength coverage from 1260nm to 1650nm, low insertion loss and back reflection.



#### Optical Spectrum Analyzer (OSA)

Low cost, spectral measurement in a compact module with built-in analysis for: SMSR, OSNR & spectral width. Targeted wavelengths for specific applications in O-Band, C-Band & L-Band.



#### **Optical Power Meter**

Fast terminating or in-line monitoring of optical signal power from -60 to +10 dBm across 750 – 1700 nm wavelengths. Model with logarithmic analog output for applications such as silicon photonics fiber alignment.



#### **Optical Switch**

Proven reliability and fast switching time. Wide variety of switch configurations: 1x4, 1x16, 16x16 and more. Models support SMF, MMF and PMF.



#### Swept, Tunable Continuous Wave Laser

Swept, tunable continuous wave (CW) laser source with 0.01 dB power stability & 400 nm/s high-speed scan rate for R&D & production testing. C/L, O & E-bands.



#### Variable Optical Attenuator (VOA)

Fast attenuation speed with low insertion loss & built-in power monitoring. Operates in fixed attenuation or constant output power modes. Models support SMF, MMF & PMF connector types.



### Bit Error Rate Tester (BERT)

4 or 8-channel Pulse Pattern Generator and Error Detector at rates up to 29 Gbps for the design, characterization and production of optical transceivers and optoelectrical components.



#### Passive Component Integration

Integrate passive optical components of your choice such as WDM couplers, splitters, bandpass filters, PM beam-splitters & circulators. Models support SMF, MMF & PMF.

### **Coherent Optical Communications**

### IQTX

### **Coherent Optical Modulation Transmitter**

Generate and control phase-modulated optical signals at 11 GHz, 20 GHz, 23 GHz or 40 GHz of bandwidth. Supports M-QAM, M-PSK and custom modulation formats & Baud rates beyond 64 GBaud.

### IQRX

#### **Coherent Optical Receiver**

Gold standard coherent receiver for the measurement of coherent modulation formats such as QPSK, 64QAM and OFDM. Available in O-Band and C/L-Band models.





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#### Coherent Signal Analysis Software

**VISIQ<sup>™</sup>** is designed to make coherent signal analysis and DSP optimization as simple as possible, and it works with high-performance real-time oscilloscopes from all leading manufacturers. It features an intuitive user-interface and supports O-band, C-band and L-Band coherent modulation with our IQRX coherent receivers.



### OMA

#### **Optical Modulation Analyzer**

High-performance reference coherent signal analyzer with powerful software for full characterization of 600G, 800G signals & more.

### IQABC

#### **Automatic Bias Controller**

Modulation format independent Automatic Bias Controller for IQ-modulators. Accurately and reliably control and optimize modulator bias points regardless of the modulation format or pattern.

### Co-Rx

#### **Automated Coherent Receiver Tester**

Automated sequential measurement of coherent receiver hardware performance to save test time and generate accurate and reliable results.







### **Product Platforms**



### Intuitive Software Interface



CohesionUI<sup>™</sup> is an innovative web-based user interface for a consistent, easy-to-use experience across our products. It includes multi-device support, which means you can control our instruments from any device with a supported web browser, including PC, tablet or smart phone. Users can also use common application environments like LabVIEW and MATLAB, or their preferred programming language such as BASIC, C, C++, or Python.



288 Channel Optical Power Meter

Bit Error Rate Tester

Optical Spectrum Analyzer

### **Specialized Test Solutions**

### Power-1410

#### **Optical Power Meter**

Fast monitoring of signal power from -60 to +10 dBm and broad wavelength range of 1250 to 1650 nm. Unrivalled channel density with up to 288 parallel channels in a single 1U rack-mountable instrument.

### **IOFROG**

### **Optical Pulse Analysis**

Measure pulse intensity and phase in both spectral and temporal domains, yielding a complete pulse characterization. With a long delay arm and high resolution spectrometer, IQFROG measures chirped pulses up to 50 ps wide, or up to 10 ps wide if the pulse is transform limited.

### Photonic Doppler Velocimetry (PDV)

Photonic Doppler Velocimetry (PDV) is an established technique used to measure high-velocity events up to tens of km/s. The Doppler module combines the key optical components for PDV measurements in a compact instrument to enable streamlined high channel count PDV test set-ups.

#### Members of

Contact Us

Our sales engineers love to talk about new test and measurement challenges, and we have the expertise and agility to build customized solutions to match your exact requirements.

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OPTICA

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