

## Optical/Comms Test & Measurement



- Optical/Protocol Transport Test (400G)
- CFP/CFP2/CFP4/QSFP+/QSFP28 Stress Test
- Optical Switching, Mfg. Lab Test
- Optical Field Test
- Fiber inspection and test



[www.tmi.yokogawa.com](http://www.tmi.yokogawa.com)

- Optical spectrum analyzers / 350nm-3.4um
- Wavelength meter
- Multi Application Test System (MATS) – Grid Tunable Laser, LD, Optical Switches, VOA, Optical Sensor
- OTDR, OTLS



- WaveShaper Family (1ch – 16ch, S/C/L band)
- WaveAnalyzer – high resolution spectrum analyzer
- WaveShaper 1000/SP 1µm Programmable Single-Polarization Filter



[www.lunainc.com](http://www.lunainc.com)

- Optical Vector Analyzer (OVA)
- High Resolution Backscatter Reflectometers (OBR)
- Tunable Lasers (Instrument and components)



[www.bristol-inst.com](http://www.bristol-inst.com)

- Wavelength Meters – fastest on the market
- Laser Spectrum Analyzers



[www.polatis.com](http://www.polatis.com)

- Optical Cross Connect Switches, non-blocking
- Compact form factor, SM and MM
- 4x4 up to 384x384 matrices available



- Fiber Lasers – CW and Pulsed: Green, 1064nm, 1550nm and 2000nm
- Amplifiers – CW and Pulsed: 1064nm, C&L Band (SM, PM), 2000nm
- Broadband Sources – 1064nm, ASE, Raman, 2000nm



[www.generalphotonics.com](http://www.generalphotonics.com)

- Polarization Controllers, Scramblers and Analyzers
- PMD & PDL generators and emulators
- OCT modules and components (MDL, PD, Couplers etc.)
- OFDR-1000 Hi-Resolution Reflectometer



- Optical Multi-Format Transmitter & Automatic Mach Zehnder BIAS Control
- Tunable lasers for C, L, C+L bands with narrow line widths
- Polarization maintaining multiplexer
- Optical DWDM decorrelator for XPolM and Coherent systems testing
- Low Cost Optical Spectrum Analyzer



- High resolution optical spectrum analyzer 10 MHz & dynamic range > 80 dB, C, C+L, L Band
- Option 230 – Measure spectrally-resolved state of polarization
- BOSA Lite with 20 MHz & > 80 dB dynamic range



NETWORKS

[www.xenanetworks.com](http://www.xenanetworks.com)

- Layer 2-3 Gigabit Ethernet traffic generation
- Covers rates from 1GE up to 100GE, supports CFP4, QSFP28, QSFP+, CXP
- Gigabit TCP testing platform



[www.mapleleafphotonics.com](http://www.mapleleafphotonics.com)

Optical Probing stations offering a modular design in a small footprint, vertical and edge coupling, electrical probe support, manual and motorized alignment, thermal management and tied together with control software.



[www.shf-communication.com](http://www.shf-communication.com)

- NRZ & PAM Pattern Generators up to 128 GBaud (256 Gbps) per Channel
- Error Analyzers up to 128 Gbps NRZ and 58 GBaud PAM4
- Arbitrary Waveform Generators up to 60 GSa/s
- Multiplexers (MUX) & Demultiplexers (DEMUX) up to 128 Gbps
- Digital-to-Analog Converters (DAC) up to 128 GBaud (256 Gbps)

## Components



- High-power laser diodes
- Wavelengths range 630 nm to 1120 nm
- Broad Area Laser, Tapered Laser, Ridge Waveguide Laser/Fabry Perot Laser, DFB/DBR Laser



- Laser Diode Modules
- Laser Bar Assemblies
- Diode Pumped Solid State Lasers
- Laser Electronics



- Optical MEMS switches and VOAs
- Switches: SM, MM, 1xN and MxN
- 2-D Galvanometers
- Rackmount, benchtop and component



Bringing Performance to Light!

- RF-over-Fiber Experts
- 50 GHz Analog Fiber Optic Links
- Antenna Remoting

[www.linphotonics.com](http://www.linphotonics.com)



- The Leader in Coherent Optical Communications.
- AC1200 providing 1.2Tbps of capacity in a 5"x7" footprint!
- CFP/CFP2 –DCO and CFP2-ACO coherent pluggables up to 200Gbps
- DSP and Silicon PIC solutions for you to integrate into your products!



- Delay Lines Interferometers
- 90° optical hybrids, Variable Optical Delay Line
- DWDM and Modal Mux/Demux
- Optical Switches. Custom optical assembly



- Fiber-Q™ Modulators and Drivers
- DFB Lasers and Modules
- Fiber Coupled Pump Laser
- Fused Fiber Optic Components



[www.shf-communication.com](http://www.shf-communication.com)

- Broadband RF & Microwave Amplifiers up to 67 GHz
- RF Switches, Filter and Attenuators
- Frequency Dividers & Multipliers
- Bias Tees and DC Blocks up to 110 GHz
- RF & Microwave Connectors and Cables up to 110 GHz



- iNbO3 Modulators: Phase, Intensity and Polarization Switches and Scramblers up to 40GHz
- Wide wavelength selection – 780nm - 2µm
- Modulator Drivers and Bias Controllers
- Reference/Analog Optical Transmitters
- Sub-nanosecond Optical Pulse Shapers



- GaAs Modulators – ideal for aerospace and satellite applications
- Broadband and IQ Modulators up to 45GHz



- Tunable chromatic dispersion emulator, compensator
- Chromatic Dispersion Emulator (up to 45,000 ps/nm)
- Narrow line width tunable laser (<1 kHz)



- 40-100GHz Photodetectors and Receivers, Single Ended and Balanced
- Integrated Balanced Receivers, DPSK, DQPSK, Coherent Solutions
- Optical Transceivers
- Optical Amplifiers



- Wavelength Management Components
- ROADMs
- WSS Elements



## Services



Z-Poynt

[www.zpoynt.com](http://www.zpoynt.com)

- Bridging ideas with profitable products and applications
- Engineering and Project Management Consulting Services
- Serving communications, RF/microwave/fiber-optics, autonomous vehicles and satellite payload marketplaces
- Team of engineering, management and business resource professionals



Communication Components, Equipment and Services

[www.xsoptix.com](http://www.xsoptix.com)

- A Small Woman Owned Business Offering Distribution, Import and Reselling services
- Distributor for Finisar, ID Photonics, Aragon, Teraxion, eagleyard, monocrom, Sercalo, Kylia, Introspect, Pico, Optoscribe, Viavi handhelds and inspection equipment, Teledyne LeCroy and G&H

## Digital, Electrical & RF/ $\mu$ wave Test



- SerDes Tester and BERT Functions, Pattern Generator Functions - 8 or 32 lanes, up to 28 Gbps, handheld form-factor, USB Controlled, Software-Defined
- Transport testing according to SATA, USB 3.0, MIPI M-PHY/D-PHY/C-PHY
- MIPI DSI-2 Protocol Analyzer
- MIPI D-PHY and C-PHY Frame Grabbers



[www.jtag.com](http://www.jtag.com)

- Expert in Boundary Scan Test and Programming solutions
- 1149.1 and 1149.6 analog support
- PXI, Ethernet and USB Controllers



[www.ni.com](http://www.ni.com)

- QuickSyn RF Signal Generators 10-20GHz (OEM modules)
- mmW Synthesizer Modules - 27 to 40 GHz, 50 to 67 GHz, and 76 to 82 GHz
- Fast switching and Low Phase Noise



[www.vaunix.com](http://www.vaunix.com)

- Low cost USB RF Synthesizers, Attenuators and Switches
- 50MHz to 20GHz
- GUI provided and Remote controllable



[www.ladybug-tech.com](http://www.ladybug-tech.com)

- USB RF Power Sensors (CW, Pulsed)
- 9 kHz to 40 GHz
- Fast (2,000 rdgs/sec), no-zero, no-cal



- Smart Power for optical components
- Multi-channel Voltage/Current sources
- Channel Counts from 8 to 120 channels



[www.shf-communication.com](http://www.shf-communication.com)

- Arbitrary Waveform Generators up to 60 GSa/s
- Synthesized Signal Generators (Synthesizers) up to 67 GHz
- Clock Distribution Instruments
- NRZ & PAM Pattern Generators up to 128 GBaud (256 Gbps) per Channel
- Error Analyzers up to 64 Gbps NRZ and 58 GBaud PAM4
- Arbitrary Waveform Generators up to 60 GSa/s
- Multiplexers (MUX) & Demultiplexers (DEMUX) up to 128 Gbps
- Digital-to-Analog Converters (DAC) up to 128 GBaud (256 Gbps)