



PLC & MEMS Optical Components

NeoPhotonics

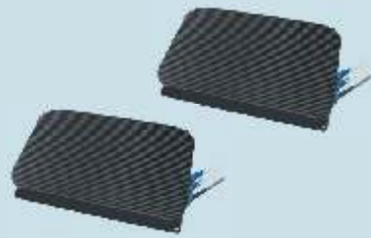
NeoPhotonics Corporation
2911 Zanker Road
San Jose, CA 95134, USA
Tel: +1.408.232.9200
Fax: +1.408.456.2971
Email: sales@neophotonics.com

NeoPhotonics (China)
Photon Bldg, 12th South Keji Rd.
South Hi-Tech Industry Park, Shenzhen, China 518057
Tel: +86.755.26748283, +86.755.26748287
Fax: +86.755.26748185, +86.755.26748186
Email: sales@neophotonics.com.cn

Check the web for a local sales office:
www.neophotonics.com / www.neophotonics.com.cn

PLC & MEMS Optical Components

» 2D 40CH PLC ROADM



Enables Remote Network Management

- Based on proven PLC technology
- Modular concept with separate add & drop units
- East/west separation design
- 40 channels, 100 GHz channel spacing
- Integrated fast switches, per channel tap monitors and VOAs
- Integrated self-calibrating electronic controller
- Standard DPRAM or I²C interface

» MSA Compliant AWG



MSA compliant packaging

- Semiconductor style mass production
- Small Form Factor available
- 50/100/200 GHz channel spacing
- 16/32/40/44/48 channel plan
- Low insertion loss & superior loss uniformity
- High channel isolation
- Telcordia GR-1209/1221 compliant

» Athermal AWG



Requires No Electrical Power

- Complete passive packaging
- Suitable for outdoors application
- 50 or 100 GHz channel spacing
- Gaussian or wideband passband
- 32/40/44 channel plan
- Low insertion loss & high isolation
- Telcordia GR-1209/1221 compliant

» VOA Multiplexer (VMUX)



Combines 40 VOAs & 40CH DWDM

- Integrated AWG temperature control
- Per channel power monitoring & attenuation control
- 100 GHz channel spacing
- 40 or 48 channel plan
- Low power consumption
- High dynamic attenuation range & accuracy
- Low PDL over whole attenuation range
- Telcordia GR-1209/1221 compliant

» Cyclic (Colorless) AWG



Simplifies Inventory Management

- MSA compliant packaging
- MUX/DMUX in one package optional
- 8 skip 0 channel configurations maximize bandwidth utilization
- 50 or 100 GHz channel spacing
- 4/8/16 channel plan
- Low insertion loss & high isolation
- Telcordia GR-1209/1221 compliant

» PLC Based OCM



Adds Intelligence to DWDM Systems

- Based on highly reliable proven AWG technology
- 50 or 100 GHz channel spacing
- Fast scan speed
- Real time feedback and control of network elements enables more robust system design
- Reduces system down time and saves operational cost
- Compact size conserves scarce rack space
- Telcordia GR-1209/1221 compliant

PLC & MEMS Optical Components

» 1xN/2xN PLC Splitter



- Low insertion loss (IL)
- Low polarization dependent loss (PDL)
- High uniformity
- Standard split counts: 1x64, 1x32, 1x16, 1x8, 1x4, 2x32, 2x16, MxNxP
- Additional split counts available on request
- Standard and small form factor packages
- Telcordia GR-1209/1221 qualified
- 40°C to +85°C operating temperature
- Proven reliability in uncontrolled environment
- Superior system performance
- Supports all standard FTTP network architectures
- Supports custom network designs

» MEMS VOA FVOA-5000



Ultra Compact VOA

- Smallest VOA
- Low loss, Low PDL
- Hermetically sealed MEMS chip
- Insensitive to shock and vibration
- Bright or dark configurations

Applications

- Gain control for amplifiers
- Power control and equalization in multichannel systems
- Mux/DeMux and OADM

» PLC Splitter Module



- Cassette/1U/2U modules and custom form factors
- 1x4, 1x8, 1x16, 1x32, 1x64 & 2x16, 2x32 split ratios
- Ultra low insertion loss & PDL
- High uniformity
- Several connector options available
- BPON, GPON, GEPON & CATV networks applications

» MEMS VOA FVOA-2000



High Speed, Low Wavelength Dependence

- High speed
- Low loss, low WDL, low PDL
- Compact
- Passed 100 billion cycles
- No epoxy in the optical path

Applications

- Gain control for amplifiers
- Subcarrier modulation
- Power control and equalization in multichannel systems fast switching

» Custom Shelf Module /Subsystem



Network Ready Solutions

- ODM business model
- Highly vertical integration in-house
- ROADM/AWG racks
- Integrated control firmware
- Standard RS232/DPRAM/I²C interface
- Customized design available
- Short design turn around time

» MEMS VOA Modules



Integrated Modules With VOAs

- Multisource solutions
- Custom modules
- Low loss, low PDL
- Highly repeatable, no hysteresis
- Telcordia GR-1312
- Bright or dark configuration

Applications

- Power control and equalization
- Receiver protection
- Channel on/off switching
- Mux/DeMux and OADM modules