

Linear Photonics

RF-over-Fiber

Components

MACOM manufactures a wide range of component photoreceivers with wide bandwidths up to 30 GHz. Using hybrid manufacturing processes, MACOM can customize bandwidth and pigtail requirements. RF transport on optical fiber has many advantages when compared to coax cable. This technology affords wider bandwidth while providing lower loss, longer distance, EMI immunity, higher reliability, smaller size, and weight, ultimately resulting in lower power consumption and lower costs. RF-over-fiber is ideal for antenna remoting, signal processing, electronic warfare (EW), radar simulations, precise time, and frequency distribution, as well as sensors.



MPR0020

20GHz Microwave Photonics Receiver

The MPR0020 Microwave Photonics Receiver extends link response to greater than 20 GHz via direct optical-to-electrical RF conversion for signal remoting, communications, radar and information processing applications.



APRR530

Amplified Microwave Photonics Receiver

The APRR530 Amplified Photo Receiver consists of a broad-band microwave InGaAs PIN photodiode internally matched to a low noise post amplifier, providing 14 dB gain from 0.5 to 30 GHz. The amplifier is matched directly to the diode output, improving system ripple response and noise figure.

Modules

Standard transmitter and receiver modules are available for operation up to 50 GHz. Customized solutions are available for higher frequencies, application optimized features and performance, and unique packaging requirements. Options are available for extended temperature use, RF amplification, and optical amplification.



DiLink

20 GHz Fiber Optic Links

Directly Modulated Fiber Optic Links provide high performance transmission of wideband RF signals up to 20 GHz over optical fiber. Featuring high reliability and small size, the DiLink transmitter and receiver modules are easily integrated into communications systems for a variety of applications including antenna remoting, radio-over-fiber, network infrastructure and multicarrier/subcarrier multiplexed analog transport.



XiMod

26 GHz Fiber Optic Links

MACOM's XiMod Transmitter and Receiver modules provide a complete solution for transporting wide bandwidth microwave signals over optical fiber. Optimized for frequencies up to 26 GHz, these links are used for many applications such as antenna distribution, electronic warfare (EW) systems, radar, sensors, and satellite communications (SATCOM).

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MODULES (con't.)



QMOD

50 GHz Fiber Optic Links

Qmod is a high performance Fiber Optic Link with bandwidth to 50 GHz for antenna remoting, sensor systems, EW applications, and millimeterwave distribution.



TimeLink DL

Time-over-Fiber Links

TimeLink DL Modules provide point-to-point time and frequency standard distribution over single mode fiber. Point-to-multipoint distribution is available using Interfacility Link (IFL) Timelink Products.

RACK MOUNT UNITS



IFL

InterFacility Link Rack Systems

IFL Rack Subsystems provide high density, high reliability, interchangeable interfacility communications links in a standard 1RU chassis. Applications include signal and antenna distribution, communications, radar, testing, campus networking, precision time and frequency distribution, delay lines, and information processing.



IFL-DL

DiLink Plug-In Modules

DiLink Plug-In Modules provide high density, high reliability, interchangeable interfacility communications links for use in our 1RU IFL chassis. Applications include signal and antenna distribution, communications, radar, testing, and campus networking.



Time-over-Fiber

Interfacility Link Systems

Time-over-Fiber (ToF) modules provide point-to-point and point-to-multipoint interfacility time standard distribution over single mode fiber. These modules plug directly into InterFacility (IFL) Rack Systems. Up to 6 independent hot-swappable modules can be accommodated in a single 1RU enclosure.



IFL-XiMod

26 GHz Fiber Optics Links

IFL Xi-MOD Transmitter and Receiver plug-in modules provide high density, high reliability, interchangeable RF over Fiber links for use in our 1RU IFL chassis. Optimized for frequencies up to 26 GHz, these links are used for many applications such as antenna distribution, electronic warfare (EW) systems, radar, sensors, and satellite communications (SATCOM).

Rack Mount Units (con't)



G-Link

GPS Antenna Remoting

G-Link Antenna Remoting Fiber Optic Links provide low noise, long distance GPS signal transfer directly from the GPS Antenna/LNA to the receiver location.



On-Time Pulse-Per-Second

Autonomously Synchronized Time Distribution

On-Time PPS fiber optic links provide remote locations with a 1PPS output signal, autonomously synchronized to the local transmitter up to 25 km away.



EDFA

Erbium Doped Fiber Amplifier

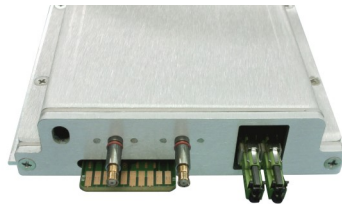
The Erbium Doped Fiber Amplifier module will accept C-Band optical signals in, amplify them, and provide up to 8 optical outputs for signal distribution to multiple locations.



Passive Optical Modules

Autonomously Synchronized Time Distribution

Optical splitters, combiners, taps, Wavelength Division Multiplexers (WDM) and other passive optical modules are available.



High Density Platform

High Density Platform is a 3RU rack mount enclosure with redundant power supplies, featuring high-density, hot-swappable front-access modules with blind-mate optical and RF connections.

Custom

MACOM has extensive capabilities to develop custom and modified COTS products. Examples include custom components, modules, systems, customized functions, OEM products and unique packaging for unusual footprints as well as small size, low power, outdoor and harsh environments. For further information and support please visit: <https://www.macom.com/support>.

