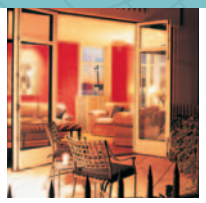
Alloptic MicroNode™ 190 RFoG ONU

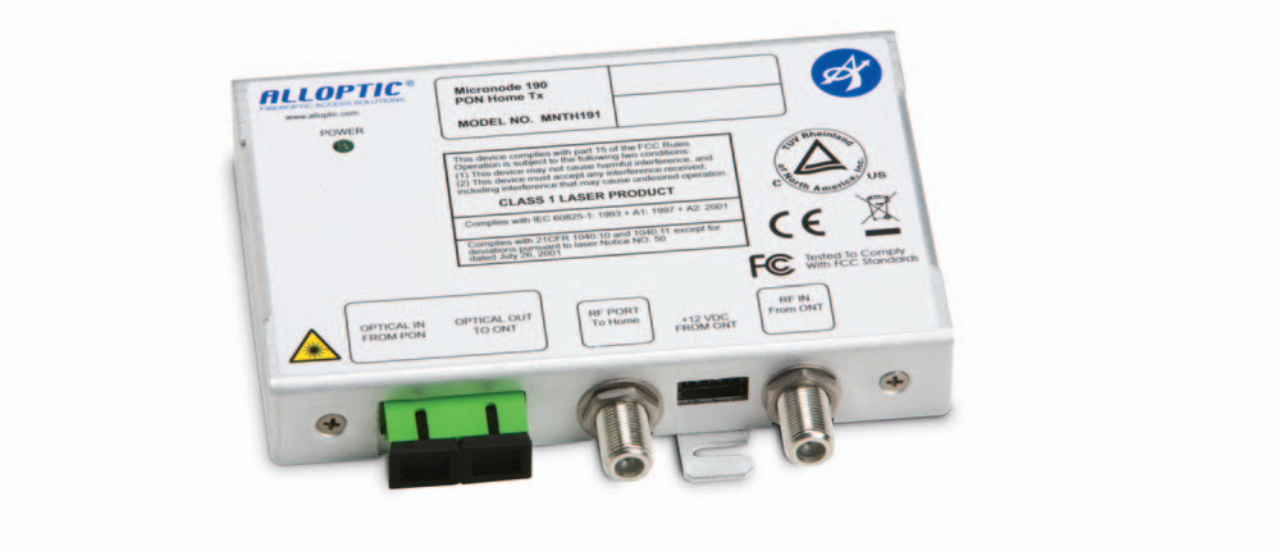

The Alloptic **MicroNode 190 RFoG ONU** delivers advanced return path RF services over a passive fiber optic distribution network. It operates on the same fiber as a working Passive Optical Network (PON) access/distribution system to provide return path capabilities, giving you the flexibility to support all voice, video and data services on a common infrastructure. Many deployed optical access systems deliver RF video downstream along with bi-directional IP-based services, but lack the ability to support an RF return path, such as the data from a set-top box or cable modem. The MicroNode 190 RFoG ONU enables that RF return path by injecting the RF signal onto a unique return path wavelength. The MicroNode 190 RFoG ONU operates with industry standard return receivers and CMTS equipment. It provides an RF return path from existing set-top boxes and cable modems, eliminating expensive network upgrades and maximizing the return from deployed access distribution networks while preserving today's equipment and operating processes.

Benefits

- Enables RF return path functionality on existing PON network without changing the ONT
- Compatible with industry standard BPON, GPON and EPON systems
- Universal support for headend and CPE equipment
- High performance, ultra low noise burst mode enables use of full RF spectrum for the return path, resulting in increased available bandwidth
- Low maintenance and high reliability of an all-fiber network
- Reduced power consumption via green technology

Features

- Extended RF spectrum
- Analog & digital video formats
- Universal HFC set top box, cable modem and headend support
- Transparent return path capability (protocol and modulation format agnostic)
- Transparent to incumbent PON systems
- Optical AGC with positive RF up-slope
- Ultra low ingress noise performance



ALLOPTIC
Imagine the Possibilities™

Alloptic MicroNode™ 190 RFoG ONU

Specifications

Physical

- 0.85" H x 4.9" W x 3.7" D
  2.2cm H x 12.4cm W x 9.4cm D
- Weight: 7oz / 0.2kg

Indicators/External Alarms

- Green LED power indicator

Optical Interface

- 2 recessed SC/APC female fiber connector

Customer Interface

- One 75 ohm coax "F" connector for customer drop
- One 75 ohm coax "F" connector for RF input from ONT

Downstream characteristics (RF pass through only)

- Frequency response: 54MHz to 1GHz
- Flatness: ±1dB
- RF loss from input from ONU to output to customer drop, 1.5dB

Return Path Optical Characteristics

- Class 1 laser
- Wavelength: 1610 ±10nm
- Output power: 0dBm to +3dBm
- Input dynamic range: +15dBmV to +40dBmV
- Frequency response:
  MNTH196: 5MHz to 42MHz
  MNTH197: 5MHz to 65MHz

Power and Environmental

- Operating temperature: -40°C to +65°C
- Humidity: 5% to 95% non-condensing
- Power input voltage: 10 to 16VDC (12VDC nominal)
- Power consumption: 1 watt max
  0.8 watts typical

Standards and Certifications

- UL listed, CE mark certified
- Meets or exceeds FCC part 15b
- IEC 60825-1:1993+A1:1997+A2:2001
- 20004/108/EC
- EN55022, EN55024, EN50083, EN61000-3 & EN60950
- Meets A3 surge on RF drop
- RoHS
- SCTE 55-1, 55-2
- Compatible with DAVIC & DOCSIS
- SCTE IPS SP910

Ordering Information

Part #	Description
MNTH196	MicroNode 196 RFoG ONU (42MHz/1610nm RP)
MNTH197	MicroNode 197 RFoG ONU (65MHz/1610nm RP)

Power

The following Alloptic power supplies may be used to operate MicroNode 190 RFoG ONUs.

Note: The MicroNode receives its power directly from the Alloptic ONT when it is used in the same enclosure. No additional power supply is required in that case.

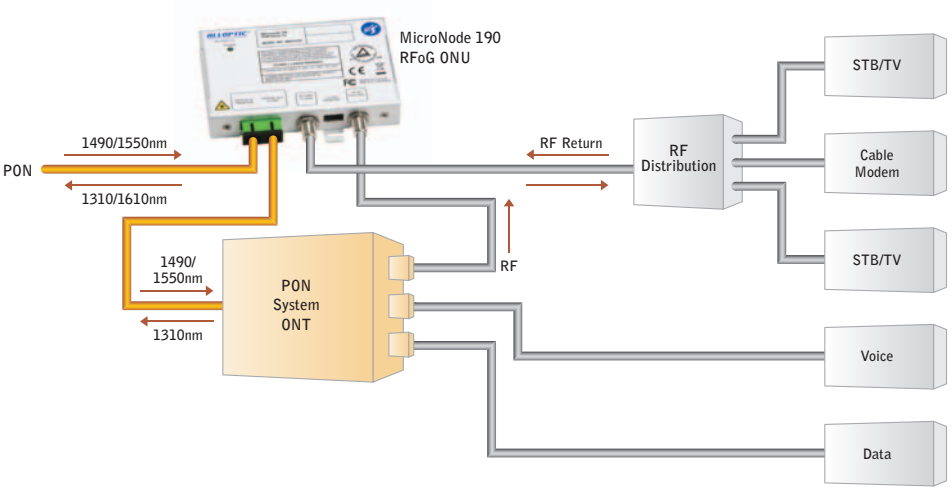
Part #	Description
PSB8000	12VDC, 24W UPS (Charger & 7.2AH battery)
PSB8002	12VDC, 24W UPS hardened (Charger & 7.2AH battery)
PSB1005	12VDC, 24W brick, plug-mounted
PSB1006	12VDC, 24W brick, international plug-mounted
PSB1007	12VDC, brick, plug-mounted, coax feed
PSB1008	12VDC, brick, international plug-mounted, 5mm barrel plug
PSB1009	12VDC, 30W hardened UPS for OSPE202 (240VAC)
PSB1010	12VDC, 30W hardened UPS for OSPE202 (120VAC)
BAT1002	12VDC, 7.2AH battery for OSPE202 and PSB8000 series

Mounting

The MicroNode 190 RFoG ONUs may be mounted directly on an interior wall or into any of the following Alloptic enclosures.

Part #	Description
OSPE101	Basic plastic outside enclosure
OSPE110	Enhanced plastic outside enclosure
OSPE120	Plastic outside enclosure with NID
OSPE121	Plastic outside enclosure with NID and OptiFit® tap
OSPE202	All-in-One metal outside enclosure
OSPE301	MicroNode standard outside enclosure

Adds Return Path to Existing RF Broadcast System



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