

## ED2-B Series PON Network Termination RFoG NODE with Burst Transmitter

### Description

The ED2-B series is a micro node designed to offer optical node application flexibility in an extremely compact housing. They are ideal for advanced fiber to the premises and FTTH applications for multiple services. The ED2-B series nodes provide an RF output up to 1GHz (1003MHz) which is suitable for signal distribution within a subscribers home.

### Applications

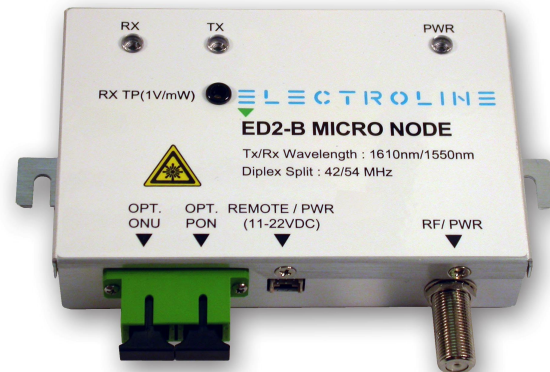
The ED2-B series micro nodes are ideal for use in fiber to the home and fiber to the business applications. It is designed to terminate an RF Over Glass (RFoG) communications network and is the demarcation point between the outside plant and the internal building RF distribution network. Compatible with GPON and GEAPON transmission modes, it includes an optical MUX for pass through of the XPON downstream and upstream wavelengths.

It can be used to overlay RFoG based services on to an existing GPON or GEAPON network or expand an RFoG network with services delivered with GPON or GEAPON transmission modes.

The device uses a single fiber and receives downstream signals at 1550nm and return transmitters can be ordered as either 1310nm, 1590nm or 1610nm depending on the system requirements. As an RFoG device it is compatible with DOCSIS® and all the legacy HFC back office functionality.

### The Electroline Advantage

A long-standing solution provider of high-quality products for specialized broadband



applications, Electroline is pleased to offer the ED2-B series micro node, which is ideal for space limited applications but performance requirements are high. The ED2-B eliminates the need for expensive installation of larger nodes, while providing comparable performance in a compact ISO-9001 manufactured package.

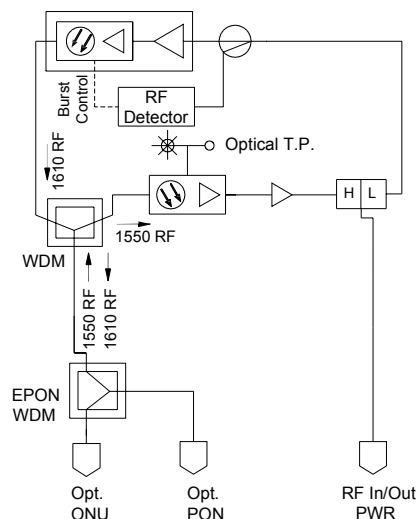
### Features

- Bandwidth to 1003MHz
- GaAs technology
- RF output for premises distribution.
- Compact housing size.
- 6KV surge protection on RF I/O port
- LED indicators for power, optical input and transmit status
- Burst Transmitter
- Low power consumption
- Single Fiber WDM technology
- Flexible powering at local or remote sites.
- Auto gain control (AGC) functionality
- 1490 nm and 1310 nm pass through for xPON overlay
- 1310nm, 1590 nm or 1610 nm transmitter options

# ED2-B Series RFoG Network Termination Node

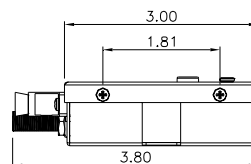
## Receiver Specifications

Optical Specifications	
Input Wavelength	1540 to 1560 nm
Optical Input Power	-6 to +1 dBm AGC controlled
Optical Power Test Point	1 V/mW
Optical Indicator On	> -6 dBm
RF Specifications	
Frequency Bandwidth	54 to 1003
Impedance	75 Ohms
Flatness	+/- 0.8 dB
Output Return Loss	≥ 16 dB
Operating RF Output Level, Note 1 With 3 dB slope ( typical)	19 dBmV (nom) (at 550 MHz, analog channel)
RF Output Stability (with optical input and temperature)	+/- 3 dB
Distortion, Note 2	
CTB	≥60 dBc @ -3.5dBm Optical Power Input
CSO	≥60 dBc @ -3.5dBm Optical Power Input
Carrier to noise ratio, Note 2	≥48 dB @ -3.5dBm Optical Power Input



## Transmitter Specifications

Optical Specifications	
Output Wavelength	1310 nm +/-50, 1590 nm +/-10, 1610 nm +/-10
Optical Output Power	2 dBm min, 4 dBm max
Optical Return Loss	>55 dB for APC Connector
Optical Indicator On	Burst Enable Status

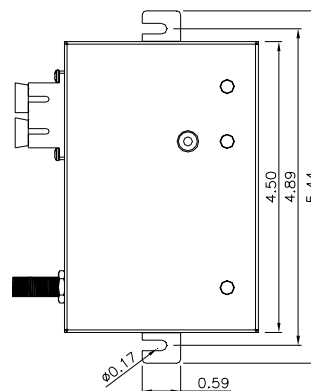


## General Specifications

Power Consumption	3.5 Watts, 10.5 to 22 volts DC
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- Specifications are subject to change without notice.

- 3.5dBm optical input, OMI = 3.5%.
- 77ch NTSC analog carriers (54-550 MHz), 73ch 256 QAM, input at -6dB, OMI = 3.5% and 20km fiber link.



## ORDERING INFORMATION:

ED2-B	T-	5-	D61-	1-	SA	5	0	1
Model Series	WDM Type:	RF Out	RTN Xmitter wavelength	Split	Opt. Conn.	Power Adaptor	Power Inserter	Housing type
	T= XPON pass through 5= No pass through	5= 19dBmV	D13=1310nm D59=1590nm D61=1610nm	1=42/54 3=65/85	SA=SC/APC FA=FC/APC	0=none 1=North American 2=Europe 5=18" cable w/ Connector	0=none 1=included	1=sheet metal

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