



FTTB-1218-1W

Fiber Optic 1218 MHz
One-Way Indoor Optical Node
Stock No. 7620

General Installation Instructions

You will find the following items in the box:

- FTTB-1218 Series Optical Node (QTY=1)
- 12 VDC Power Supply (QTY=1)



CAUTION: If any of the equipment appears to have been damaged, do NOT connect it to a power source. This will only cause additional damage to the unit. Contact Technical Support for further instructions.

The following tools and supplies are recommended for installation:

- An optical power meter
- A digital multimeter
- A cable TV RF meter or spectrum analyzer
- A standard fiber test jumper
- Denatured or 99% pure isopropyl alcohol and lint-free fiber optic cleaning wipes.

The **FTTB-1218-1W** has an operating temperature range of -20°C to +60°C. It should be mounted in an adequately ventilated area. For a longer life span, it should not be operated at the upper limit of the temperature range. Installation in wet areas or areas of extremely high humidity should be avoided. The FTTB-1218-1W should not be installed in areas that are accessible to children. The FTTB-1218-1W may be installed and operated in any position on a flat surface. The unit has two mounting holes to accommodate either wood screws (#4 or #6 pan-head) or 6-32 pan-head machine screws for tapped mounting holes. These are commonly available at hardware stores.

Optical Connectors

The optical input connector is an SC/APC type termination. Should a FC/APC connector be required for your installation, please see Blonder Tongue model FC/APC Adapter Stock # 7607.

Powering

Apply +12 VDC to the DC socket from the included power supply.

Operational Setup

The FTTB-1218-1W will operate at optical input levels as high as +2 dBm however there is little improvement in the C/N performance with optical input levels above 0 dBm. For optimum distortion performance it is recommended that the optical input be kept at -1 dBm.

The unit's RF output is directly proportional to the optical input level. If lower output levels are required, use an in-line pad to attenuate the RF output of the unit to maintain optimum C/N performance.

Optical vs RF Levels

Optical Input Power Level (dBm)	Approx. RF Output Level (dBmV)	Received Power DC Test Point (V)
-8	14	0.16
-6	18	0.25
-4	22	0.40
-2	26	0.63
-1	28	0.79
0	30	1.00
+1	32	1.26
+2	34	1.58

DC voltage Test point vs Optical input power (calibrated at 1310 nm optical input)

Need More Information?

For additional information and product warranty, download the latest User Manual (PDF) by visiting our website.

Navigate to the product page by entering the full Model Name or Stock Number in the search field. Upon reaching the product page, the "User Manual" download link will be located beneath the product image.

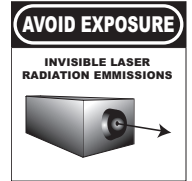
www.blondertongue.com

For technical support please contact us at 1-800-523-6049 between the hours of 8am and 5pm EST.

Safety Instructions



WARNING: The optical emissions from the units are laser-based and present eye hazards. Follow all safety precautions.



The YIELD sign symbol is intended to alert you to the presence of RECOMMENDED operating and maintenance (servicing) instructions.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER FROM THIS UNIT. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV System Installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.



You should always follow these Instructions to help ensure Against injury to yourself and damage to your equipment.

Safety Precautions

The optical emissions from the units are laser-based Class IIIb, and may present eye hazards if improperly used. **NEVER USE ANY KIND OF OPTICAL INSTRUMENT TO VIEW THE OPTICAL OUTPUT OF THE UNIT.**

As always, be careful when working with optical fibers. Fibers can cause painful injury if they penetrate the skin.

Laser Safety Procedures

- ➔ **ALWAYS** read the product data sheet and the laser safety label before powering the product. Note the operating wavelength, optical output power, and safety classifications.
- ➔ If safety goggles or other eye protection are used, be certain that the protection is effective at the wavelength(s) emitted by the device under test **BEFORE** applying power.
- ➔ **ALWAYS** connect a fiber to the input of the device **BEFORE** power is applied. Power should never be applied without an attached fiber input. If the device has a fiber output, a connector should be attached that is connected to a fiber. This ensures that all light is confined within the fiber waveguide, virtually eliminating all potential hazard.
- ➔ **NEVER** look in the end of a fiber to see if light is coming out. **NEVER!** Most fiber optic laser wavelengths (1310 nm and 1550 nm) are totally invisible to the unaided eye and will cause permanent damage. Shorter wavelength lasers (e.g. 780 nm) are visible and are very damaging. Always use instruments, such as an optical power meter, to verify light output.
- ➔ **NEVER, NEVER, NEVER** look into the end of a fiber on a power device with **ANY** sort of magnifying device. This includes microscopes, eye loupes, and magnifying glasses. This **WILL** cause permanent, irreversible burn on your retina.
- ➔ **ALWAYS** double check that power is disconnected before using such devices. If possible, completely disconnect the unit from any power source.
- ➔ If you have questions about laser safety procedures, please call Blonder Tongue before powering your product.