

## FTTB-1218-L1W Series

# One-Way Indoor Optical Node with Dual 44 dBmV Outputs

The FTTB-1218-L1W (One-Way Indoor Optical Node) converts the optical signal received from the headend into dual +44 dBmV RF outputs with automatic gain control (AGC) over an optical input range of -4 dBm to +3 dBm.

The compact housing includes an optical receiver with an LCD display, control keys, RF AGC, adjustable attenuator, adjustable slope, and RF amplifier providing high RF output and excellent performance up to 1218 MHz bandwidth.



### **Features**

- Optical and RF Parameters Configured via User-Friendly LCD Menu with Three Key Navigation
- 1218 MHz Forward RF Bandwidth
- High Performance and Low Power Consumption GaAs Technology
- Dual +44 dBmV RF Outputs with Automatic Gain Control (AGC)
- Variable Attenuator and Slope Controls
- Die-Cast Aluminum Housing for Indoor Installation
- -20 dB RF Test Port
- One 18 VDC "F" Connector Input Port for Local/Remote Powering

### **Ordering Information**

Model	Otook "	Description
FTTB-1218-L1W	7621	One-Way Indoor Optical Node; 54-1218 MHz; Dual 44 dBmV Output w/ AGC

### **Accessories**

Model	Stock #	Description
FC/APC Adapter	7607	SC/APC Male to FC/APC Female Connector Adapter

### **Specifications**

#### **Optical and RF Performance**

Optical				
Input Optical Wavelength:	1210~1650 nm			
Optical Input Connector:	SC/APC, Single Mode			
Optical Return Loss:	50 dB			
Optical Input Power:	-6 dBm ~ +3 dBm			
AGC Effective Optical				
Input Range:	-4 dBm ~ +3 dBm			
RF				
RF Bandwidth:	54 ~ 1218 MHz			
RF Output Level:	Dual 44 dBmV; 0 dB attenuation & slope			
AGC RF Output Stability	± 1.5 dB			
Range: RF Flatness:	± 0.75 dB			
RF Return Loss:	>16 dB			
RF Output Impedance:	75 Ω			
RF Test Port:	-20 dB			
CNR:	≥ 51 dB at -1.0 dBm			
CSO:	<-62 dBc at 77 CW carriers			
CTB:	<-65 dBc at 77 CW carriers			

#### **Test Conditions**

FORWARD PATH: 77 CW carriers ( $54\sim550$  MHz) and digital channels ( $550\sim1218$  MHz, RF level 10 dB lower) at -1 dBm optical input (10 km fiber + optical attenuator).

RETURN PATH: return path specs are measured in transmitter and receiver composed link.

#### **LCD Control and Monitoring**

User-Adjustable Controls Equalizer: Attenuator:	0-15 dB (1 dB step) 0-15 dB (1 dB step)
Monitoring [1] Optical Input Level: RF Output Level: AGC Attenuator:	< -4.0 dBm or > +3.0 dBm < 10.0 dBmV or > 50.0 dBmV 0-15 dB (Status Only)
System Status Power: Temperature:	< +16.5V or > +19.5V (18V ±1.5V) < -40.0° C or > +80.0° C
System Information:	Model Serial Number Firmware Version

[1] Monitoring alerts will display when the following specifications are out of range.

#### General

Connectors	
Fiber Port:	1x SC/APC Female
RF Ports:	2x F-Female
-20 dB RF Test Port:	1x F-Female
18 VDC Port:	1x F-Female for DC power input
Chassis Dimensions: (L x W x H)	6.85" x 4.9" x 1.54" (174 mm x 124 mm x 39 mm)
Weight:	1.18 lbs (0.54 kg)
Power	
Power Supply:	18V 1.3A DC Adaptor, UL Certified
Power Consumption:	≤ 9 W
Working Temperature:	-4 to 140 °F (-20 to +60 °C)
Storage Temperature:	-40 to 185 °F (-40 to +85 °C)
Humidity:	5%~95% Non-condensing
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