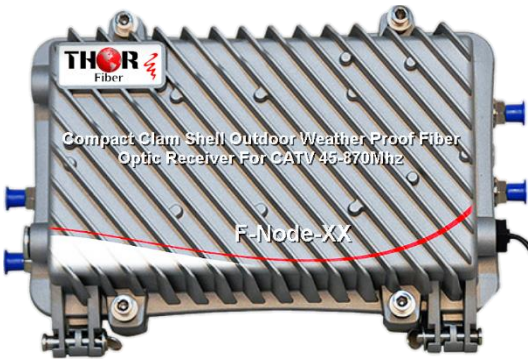
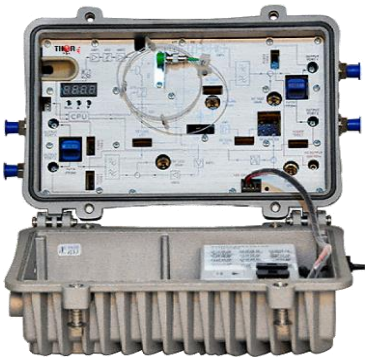
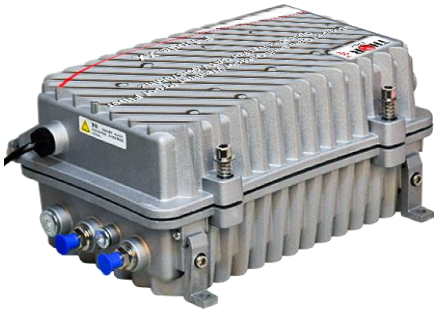
DATA SHEET : F-Node-02

Outdoor Weather Proof RF CATV Fiber Optic Receiver 45-1000Mhz with dual Output



The Thor Fiber RF fiber transport systems are made to easily support the transport and distribution of CATV RF signals over single mode fiber optic cable. **This F-NODE-02** is used as an outdoor receiver in a special clam shell style weather resistant enclosure for easy drop locations outside of a building. Relying on the incoming signal from the Thor Fiber RF Transmitter of your choice, this CATV mini receiver is used as a low-cost end point when rack equipment is not needed or when the conditions require a professional installer to mount the unit on the side or roof of a building. This particular model is made for a single mode fiber input, has a test node inside for RF output, and on the opposite side has two RF F-Type connectors that you can easily connect your RF cable to for easy output drive to your headend to RF architecture.
Use to easy, compact design, and powerful enough to drive the RF signal to numerous endpoints with it's inherent dual output design. **The F-NODE-02** requires single mode fiber like all RF devices, and utilizes the industry standard SC/APC fiber connector. SC/APC is a staple of RF distribution over fiber to limit and reflections to create a solid point to point connection. Also included is AGC (automatic gain control) and the highest degree of processing creating a very powerful and useful tool for anyone that necessitates a great receiver that can be used in any installation.

IMPORTANT NOTE* (it is very important to interface our unit with SC/APC - Angle Polished Connector to avoid any light reflections.**
If your fiber is terminated with the SC, ST, FC /PC flat connector, you need to use an optical jumper from PC type to SC/APC for proper conversion.

Features

- PIN Photoelectric Converter and High Response.
- Optimized circuit design, SMT process production, signal path, fluency photoelectric signal transmission.
- Good linear RF attenuation and equality and high accuracy.
- GaAs amplify, power double output, high gain and low distortion.
- Optimization AGC performance, when the input power range is -9~+2dBm,
- Optical Automatic Gate Control (AGC)
- Able to receive optical signals in either 1310nm or 1550nm bands.
- Power Supply Included, optical connector SC/APC

Specifications

	Unit	Technical Parameters	
Optical Parameters			
Receive Optical Power	dBm	-9 ~ +2	
Return Loss	dB	>45	
Optical Wavelength	nm	1100 ~ 1600	
Connector Type		SC/APC	
Fiber Type		Single Mode Only	
Circuit Performance			
C/N	dB	≥ 51(-2dBm Input)	
C/CTB	dB	≥ 65	Output Level 108 dBμV (+48dBmv) each Balanced 6dB
C/CSO	dB	≥ 60	
RF Performance			
Frequency Range	MHz	45 ~1000	
Flatness in Band	dB	±0.75	
Rated Output Level	dBμV	≥ 108	
Max Output Level	dBμV	≥ 114	
Output Return Loss	dB	≥16(45 ~550MHz)	≥14(550 ~1000MHz)
Output Impedance	Ω	75	
Electronic Control EQ Range	dB	0~10	
Electronic Control ATT Range	dBμV	0~20	
Return Transmit Performance Parameters			
Optical Parameters			
Optical Transmit Wavelength	nm	1310±10	
Output Optical Power	dBm	1 ~ 5	

Connector Type		SC/APC
RF Parameters		
Frequency Range	MHz	5 ~ 65 or according to the requirement of user
Flatness in Band	dB	±1
Input Level	dBμV	85 ~ 90
Output Impedance	Ω	75
General Parameters		
Supply Voltage	V	A:AC(150~265)V;B:AC(35~90)V
Operating Temperature	C	-40~60
Storage Temperature	C	-40~65
Relative Humidity	%	Max 95% No Condensation
Consumption	VA	≤ 30
Dimension	mm	240(L) x 240 (W) x 150(H)

Model Selection :

F-Node-02 Outdoor Weather Proof RF CATV Fiber Optic Receiver 45-1000Mhz with dual output

F-Node-04 Outdoor Weather Proof RF CATV Fiber Optic Receiver 45-1000Mhz with 4 outputs