

# CATV Optical Transmitter for FTTx Networks

This optical transmitter is applicable to GPON and EPON networks. It is compatible with any FTTx PON technology.



## Overview

### High-Performance FTTx Optical Transmitter

This CATV Optical Transmitter is specifically designed for FTTH (Fiber To The Home) networks, offering full compatibility with GPON, EPON, and other FTTx PON technologies. It utilizes a DFB coaxial small package laser and GaAs amplifier active devices to ensure excellent linearity and flatness across the entire frequency range. Its ultra-low noise technology and compact design make it an ideal solution for high-quality signal distribution in modern fiber optic infrastructures.

## Key Features

### Key Features

- Designed for FTTH (Fiber To The Home) networks
- Excellent linearity and flatness
- Single-mode fiber with high return loss
- Utilizes GaAs amplifier active devices
- Ultra-low noise technology
- DFB coaxial small package laser
- Compact size for easy installation
- Red-LED power indicator

## Optical Specifications

### Optical Performance

**1550 nm**

Output Wavelength

**10 mW**

Output Power

**45 dB**

Optical Return Loss

Fiber Type

Single Mode

## RF Parameters

### RF Performance Data

Parameter	Value	Unit
Frequency Range	47-1000	MHz
Flatness	±0.75	dB
RF Input Level	80±5	dBm
Input Impedance	75	Ω
Return Loss	e16	dB

### Signal Quality Metrics

- C/N: e52 dB
- CSO: e60 dB
- CTB: e63 dB

## Interface & Power

### Interface Types

Interface	Connector Type
RF Connector	F-female
Optical Connector	SC/APC
Power Supply Port	F-female

Power Supply 12 VDC

Power Consumption <2 W

## Physical Characteristics

Dimensions 100 x 98 x 28 mm

## Compliance & Service

### Certifications

CE

### Warranty & Service

- 1-2 Year Warranty
- Defective rate less than 0.2%
- OEM services available (Logo, Packaging, Software)