

FTTH PON & CATV WDM OPTICAL RECEIVER

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Variants

FWR-8610RW

Details

The **FWR-8610RW FTTH PON & CATV WDM Optical Receiver** is a high-performance optical receiver designed for FTTH, CATV, and Triple-Play network applications. It combines **WDM wavelength separation technology** with advanced **RF AGC (Automatic Gain Control)** to provide stable RF output and superior signal quality.

The receiver efficiently separates GPON/EPON/XGSPON data signals and CATV signals, making it an ideal solution for broadband service providers, cable TV operators, ISPs, and fiber-to-the-home deployments.

Optical Input

1310/1490/1550nm

RF Frequency

47~1000MHz

Optical Power

+3 ~ -18dBm

Power Consumption

? 5W

Key Features

? High Isolation WDM Technology

? Built-in RF AGC Automatic Gain Control

? Supports FTTH, CATV & Triple-Play Networks

? Excellent CNR, MER, CTB & CSO Performance

? Compatible with GPON / EPON / XGSPON Networks

? Compact Design with LED Optical Status Indicator

Optical Specifications

Parameter	Specification
Model	FWR-8610RW
Product Type	FTTH PON + CATV WDM Optical Receiver

Parameter	Specification
Application	FTTH, CATV, Triple-Play Networks
Technology	High Isolation WDM + RF AGC
Fiber Connector	SC/UPC or SC/APC
Optical Input Wavelength	1310 / 1490 / 1550 nm
Data Output Wavelength	1310 / 1490 nm
CATV Wavelength	1540 ~ 1560 nm
Channel Separation	? 40 dB
Responsivity	? 0.9 A/W
Optical Receive Power	+3 dBm ~ -18 dBm
Optical Indicator	LED Status Indicator (? -15 dBm)
Optical Return Loss	? 55 dB

RF Performance

Parameter	Value
Frequency Range	47 ~ 1000 MHz
Flatness	? ± 1 dB
RF Output Level	82 / 76 / 70 dB _V (± 1 dB)

Parameter	Value
Output Adjustment	0 ~ -18 dB
RF Output	Metric (Single Output)
RF Return Loss	? 14 dB (75?)
CNR / MER	? 44 dB / ? 34 dB
CTB / CSO / HUM	? 65 dB / ? 60 dB / ? 60 dB

Power & Environmental Specifications

Parameter	Specification
Power Supply	AC 155–255V ? DC 12V
Power Consumption	? 5W
Operating Temperature	-35°C to +50°C
Storage Temperature	-40°C to +75°C
Humidity	5% ~ 90%
Dimensions	130 × 60 × 22 mm

Packing Information

Item	Specification
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Packaging	1 Piece / Box
Carton Quantity	80 Pieces / Carton

Applications: FTTH Networks, GPON Systems, EPON Networks, XGSPON Deployments, CATV Distribution Networks, Triple-Play Services, Broadband Access Networks, Hotels, Apartments and ISP Infrastructure.

D-TECH Recommendation: Ideal for FTTH operators requiring simultaneous Internet, IPTV and CATV delivery over a single optical fiber infrastructure while maintaining excellent RF signal quality.