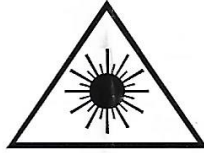


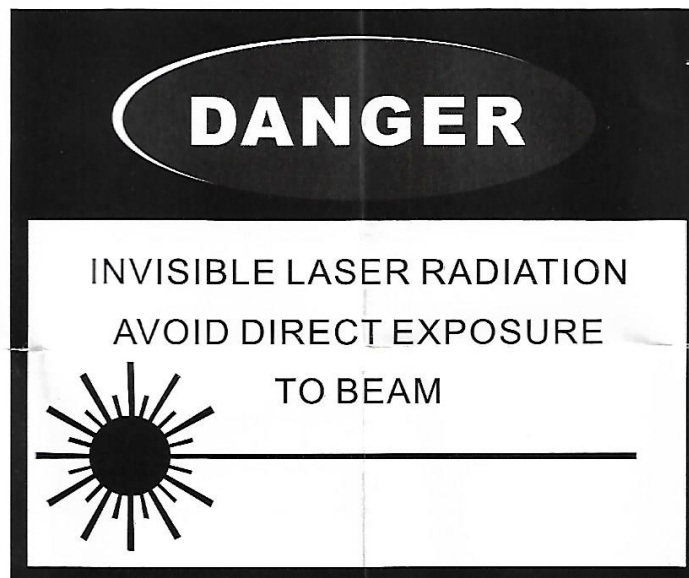
# CATV+SAT-IF Optical Receiver

## User's Manual



**Danger**

Invisible infrared light is mostly used in optical communication system nowadays, thus it is absolutely forbidden to direct exposure to beam. Otherwise, it would cause damage to retina or cause blindness at worst.



### Features:

1. Designed for FTTH(Fiber To The Home) networks
2. Wide operating frequency range, 47-2150MHz
3. Excellent linearity and flatness
4. Wide range of optical input power
5. Single-mode fiber high return loss
6. Using GaAs amplifier active devices
7. Ultra low noise technology
8. Smaller size and easier installation
9. Red-LED for power indication
10. Double color LED for optical power indication (Non-lighted: optical power  $\leq -10\text{dBm}$ , Green:  $-10\text{dBm}$   $<$  optical power  $\leq +3\text{dBm}$ , Red: optical power  $> +3\text{dBm}$ )
11. ORH-2020 is standard type, ORH-2020F is with built-in filter, ORH-2020A is with AGC function, ORH-2020AF is with built-in filter and AGC function

## Specifications:

Item	Description	Remark
RF Connector	F-female	
Optical Connector	SC/APC	
Power Supply	F-female	
Responsivity	$\geq 0.9\text{A/W}$	
Input Optical Power	-10~+3dBm	
	-7~+2dBm	AGC
Optical Return Loss	$\geq 45\text{dB}$	
Receive Wavelength	1260~1600nm	ORH-2020/ORH-2020A
	1550 $\pm$ 20nm	ORH-2020F/ORH-2020AF
Optical Fiber Type	Single Mode	
Frequency Range	47-2150MHz	
CATV Flatness	$\pm 0.75\text{dB}$	
CATV Output Level	$\geq 80\text{dB}\mu\text{V}$	AGC
CNR	$\geq 50\text{dB}$	-1dBm input power
CSO	$\geq 62\text{dB}$	
CTB	$\geq 65\text{dB}$	
Return Loss	$\geq 14\text{dB}$	
AGC Stability	$\pm 1\text{dB}$	ORH-2020F/ORH-2020AF
Output Impedance	75 $\Omega$	
SAT-IF Flatness	$\pm 1.5\text{dB}$	
SAT-IF Output Level	-40dBm	
Power Supply	12V	
Power Consumption	<2W	
Dimensions	75*63*17mm	

## The Package Includes:

1. Optical receiver X 1

2. 12V DC Power Supply X 1

3. User's Manual X1

