

# ROS-1000

## Optical Switch



### Product Description

ROS-1000 optical switch is used for optical signal backup in cable TV FTTx network, in order to improve network reliability and service level.

In automatic operation mode, when main road optical signal lower than the settings value or signal loss, it will switch to the backup signal road automatically, to ensure that the output signal is not interrupted. When the main road signal back to normal, it will switch to the main road automatically. In manual operation mode, switching by key button or remote management network.

ROS-1000 also has cable TV optical signal RF monitoring function, when RF transmitter has the output power but RF has the problem, ROS-1000 can also play line automatic detection and switching, ensure the transmission signal quality, solve the conventional optical switch can not respond to the state of the problem of optical transmission of RF link.

ROS-1000 power supply module adopt new generation of switching power supply circuit, it has great features of dual power supply, hot backup and hot pluggable, it has high conversation efficiency, small ripple, can be a stable job in a big load over many years, small heat, low heat dissipation requirements, temperature adaptability, guarantee engage reliability of the transmission system lines.

### Application

1. Self-healing circle network
2. CADM system

### Features

1. Fast response speed, typical switching time <10ms.
2. Low insert loss, <1.2dB (typical<0.8dB),
3. With optical link RF monitoring switch backup feature.
4. Wide optical power detecting range, -7~+24dBm, cover the whole cable TV used optical power.
5. Optical power of main and backup devices real-time monitoring.
6. Keep the original state under power-down state.
7. Two work mode set: Auto monitoring switch mode, manual switch mode.
8. Dual windows design, work wavelength 1310nm and 1550nm optional.
9. Two power supply support hot pluggable, balance the work load, power load is lighter, with seamlessly switch failure, greatly extend the work life.
10. With SNMP management function, realize the remote management and local monitoring.

## Datasheet

Parameter	Unit	Index
<b>Optical Parameter</b>		
Work Wavelength	nm	1310±50&1550±50
Insert Loss	dBm	<1.2 (typical<0.8)
Return Loss	dB	<50
Crosstalk	dB	<-60
Polarization Dependent Loss	dB	<0.1
Wavelength Dependent Loss	dB	<0.1
Switch Optical Power Range	dBm	-7~24
Output Optical Power	dBm	0~24
Optical Power Detection Accuracy	dB	±0.2
Optical Power Resolution	dB	0.1
Switching Time	ms	<10
Switch Type	/	Retentively
<b>General Parameter</b>		
Working Life	Time	1,000,000
Connector Type	/	SC/APC, FC/APC
Input Voltage	V	110~265V/50Hz or 32~64V DC
Power Consume	W	≤3
Work Temp.	°C	-5~+55
Store Temp.	°C	-25~+85
Work Relative Humidity	%	10%~95%
Dimension	mm	430*300*43.5
Weight	kg	5