

OSW-1X2-200UM

1×N Mechanical Optical Switch

USER MANUAL

Introduction

1xN mechanical optical switch is a kind of light path control equipment. It can realize multi-channel fiber optic light path switching. In the optical fiber transmission system, it is used for multi-channel fiber monitoring, multi light source/detector selection, and optical fiber path protection etc. Besides, it is also used in optical fiber test system for optical fiber and related component test, outdoor cable test and multi-spot optical sensors monitoring system.

Features

- Low Loss and High Reliability
- Serial Interface (RS-232)
- Modularized Design
- Epoxy-free on Optical Path

Applications

- Ring Network
- Remote Monitoring in Optical Network
- Testing of Fiber Optical Component

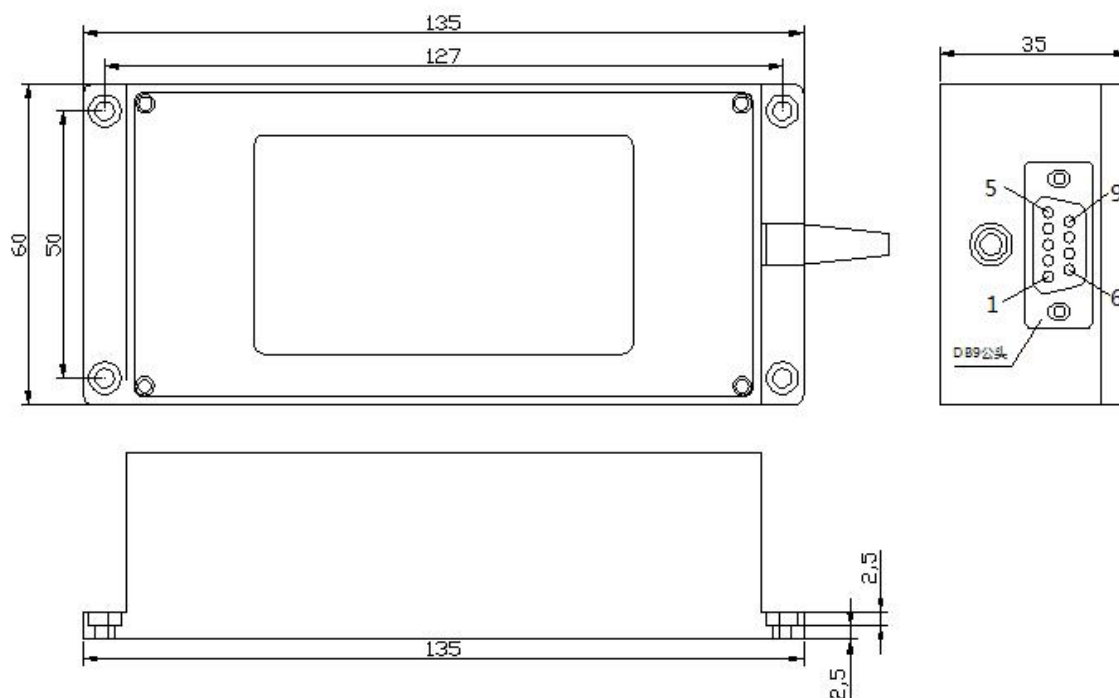
Specifications

Parameter	Parameter Values
Model	OSW-1X2-200UM
Insertion Loss	≤ 1.5 dB
Wavelength Range	200-1200 nm
Test Wavelength	532 nm
Fiber Type	200UM (NA=0.22)
Return Loss	≥ 30 dB
Crosstalk	≥ 50 dB
PDL	≤ 0.1 dB
WDL	≤ 0.25 dB
TDL	≤ 0.25 dB
Repeatability	≤ 0.05 dB
Lifetime	$> 10^7$
Switching Time	≤ 20 ms (Adjacent channel)
Connector	SMA905
Control Mode	TTL
Working Power Supply	5V/600 mA
Product Size	135 x 60 x 35
Operating Temperature	-20 °C to +70 °C
Operating Temperature	-40 °C to +85 °C

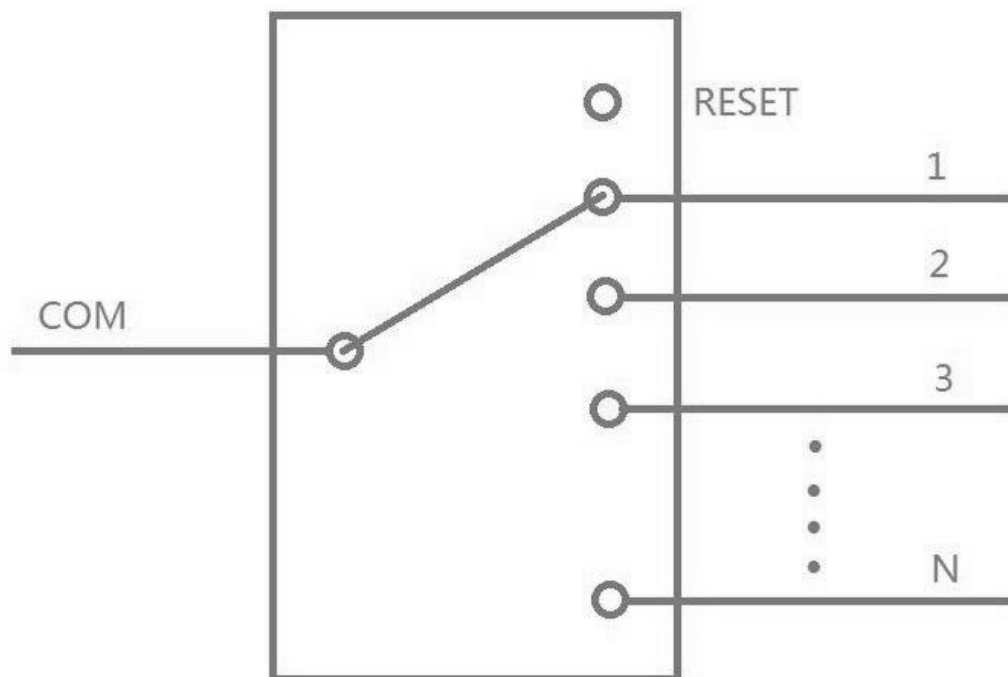
Pin Specifications

DB-9 male connector			
Pin No.	I / O	Signal	Description
1	Input	D0	D0~ D3 is channel selection Bit0~Bit3,D0 is low, D3 is high
2	Input	D1	
3	Input	D2	
4	Input	D3	
5	Input	RESET	TTL, Low level reset to channel 0. High level means channel selection bits are effective.
6	Out	READY	TTL, Ready (High=Not ready, Low=Ready)
7	Out	ERROR	TTL, Error OR Failure , (High=Error, Low=No error)
8	Power	GND	Ground
9	Power	VCC	5.0±5% VDC Power Supply (max 600mA)

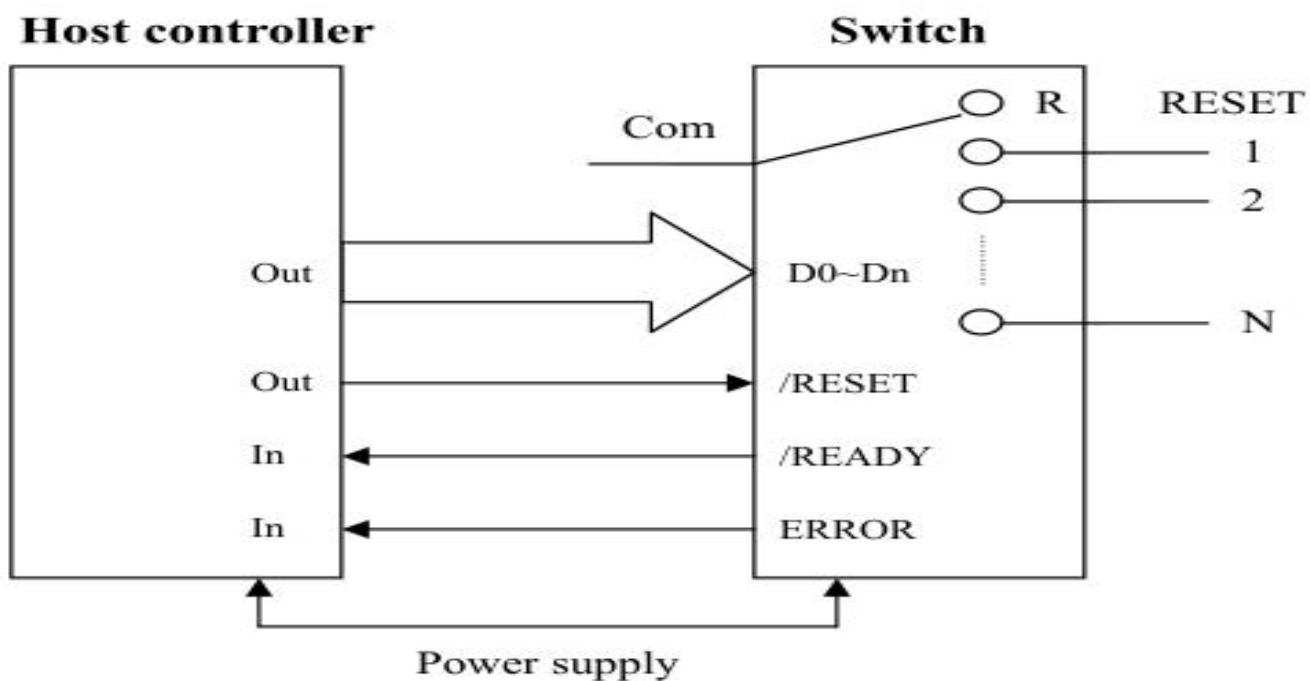
Dimension



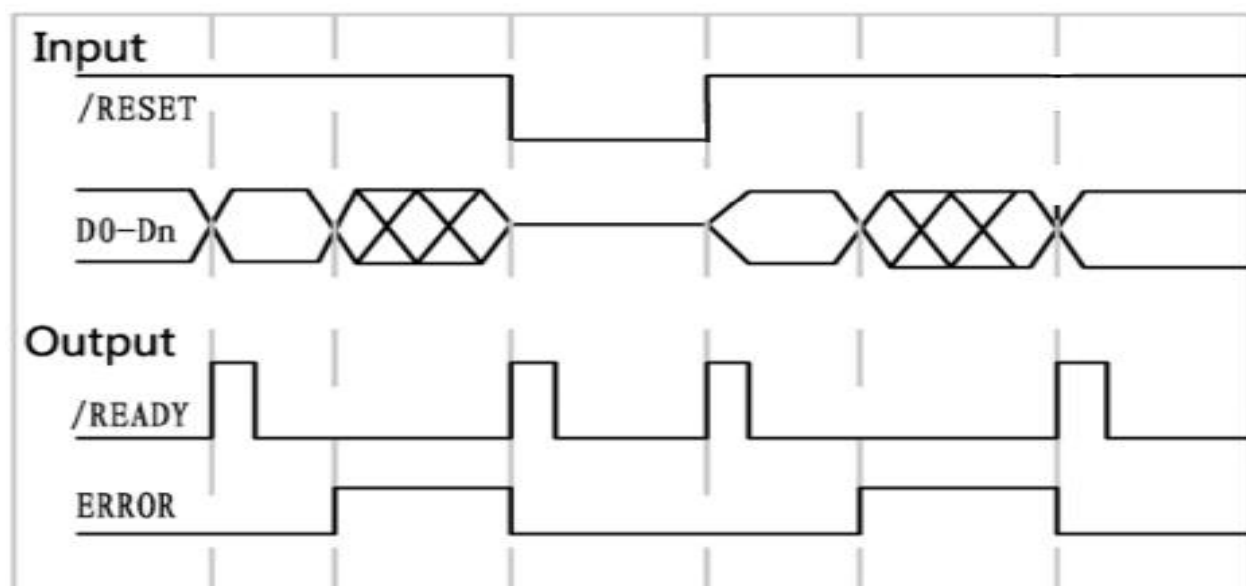
Optical Route



Control Chart



Timing Diagram



Channel Selection Table

Channel	D0	D1	D2	D3	RESET
COM-0	x	x	x	x	0
COM-1	0	0	0	0	1
COM-2	1	0	0	0	1