



Product Name	GAOTek Matrix Optical Switch xDSL Tester
Product SKU	GAOTek-XDSL-166
Product URL	https://gaotek.com/product/gaotek-matrix-optical-switch-xdsl-tester/



Contents

GAOTek Matrix Optical Switch xDSL Tester	3
Introduction	3
Features	3
Applications.....	3
Specifications	4
Pin Specifications	5
Dimension	6
Optical Route	6
Control Chart.....	7
Communication Protocol	7
Operation	8
Software Control Chart (For Reference Only)	9



GAOTek Matrix Optical Switch xDSLTester

Introduction

GAOTek Matrix Optical Switch xDSL Tester 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	GZ-2X12-SM-ST
Insertion Loss	≤0.8 dB
Wavelength Range	700~1100 nm
Test Wavelength	850 nm
Fiber Type	9/125um
Return Loss	≥30 dB
Crosstalk	≥ 70 dB
PDL	≤0.05 dB
WDL	≤0.25 dB
TDL	≤0.25 dB
Repeatability	≤0.02 dB
Lifetime	> 10 ⁷
Switching Time	≤12 ms (Adjacent channel)
Optic Power	≤500 mW
Connector	FC/PC
Control Mode	RS232

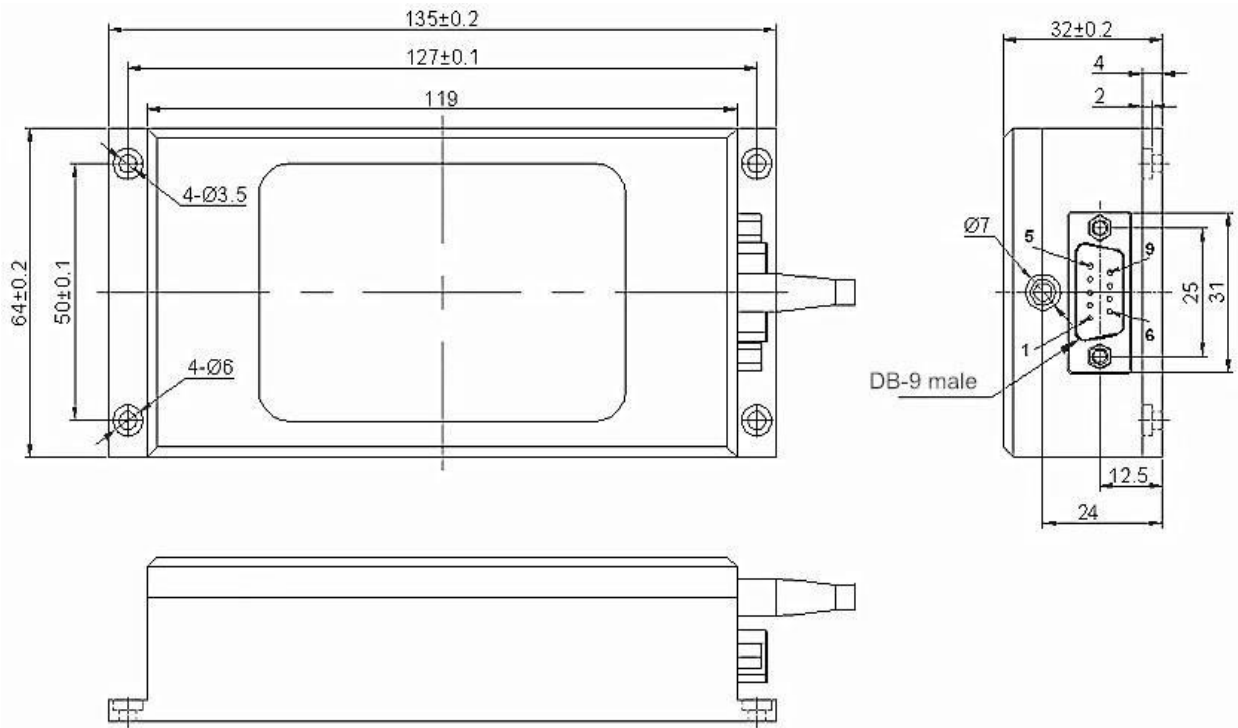


Working Power Supply	5V/600 mA
Product Size	135 x 64 x 32
Operating Temperature	-20 °C to +70 °C
Operating Temperature	-40 °C to +85 °C

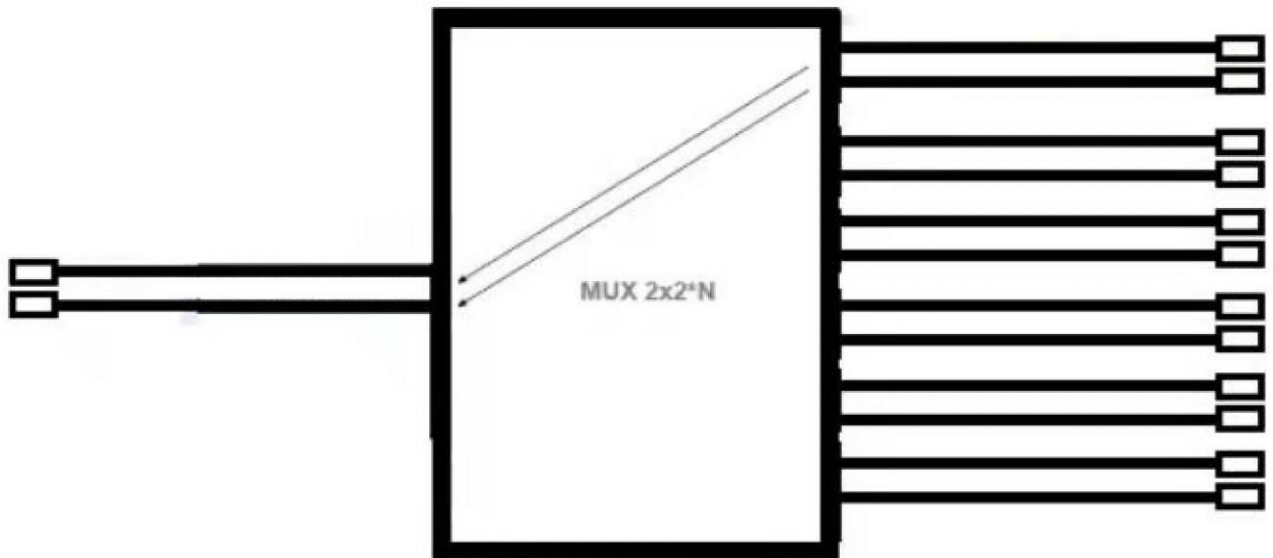
Pin Specifications

DB-9 Male Connector			
Pin No.	I / O	Signal	Description
2	Input	RXD	Receive Data
3	Out	TXD	Send Data
5	Power	GND	Ground
8	Power	GND	Ground
9	Power	VCC1	5.0±5% VDC Power Supply (600mA)
1,4,6,7	NC	NC	Vacancy

Dimension

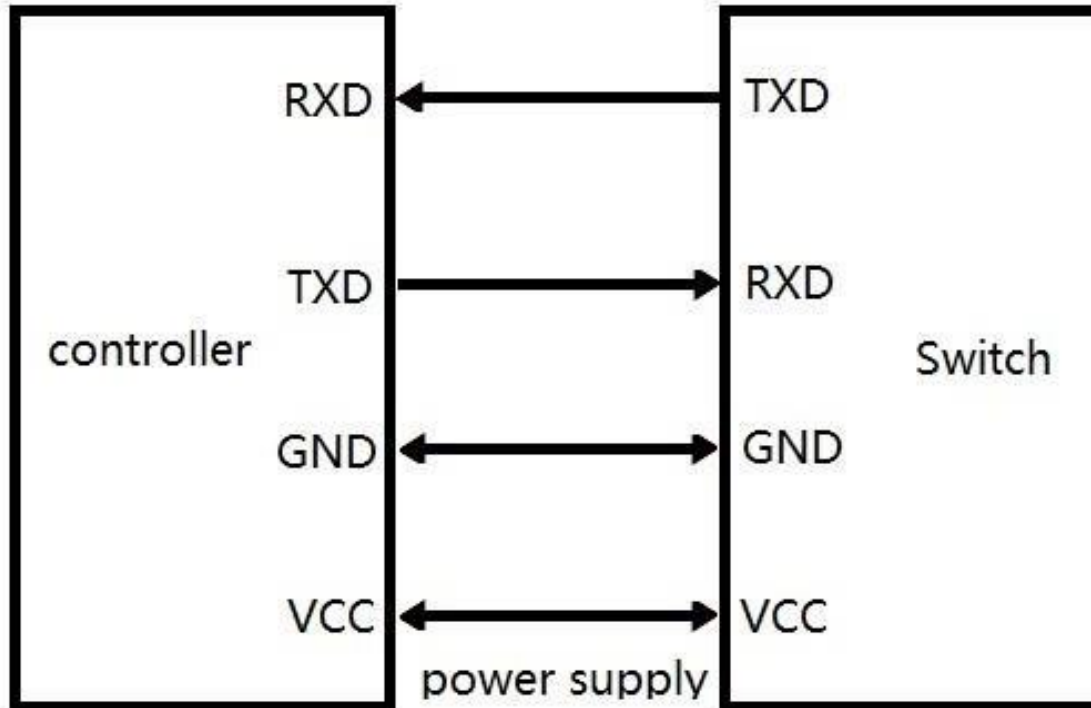


Optical Route





Control Chart



Communication Protocol

- “_” expression underline.
- Communication protocols are all capital letters.
- The communication protocol commands, "<" as the start, ">" as a terminator.

Name	Instruction	Describe
	Send: <OSW_OUT_XX>	Select optical switch channels set command said, XX is 00 to reset channel XX is 01 to channe 01, Set up successfully returns 1 Beyond the channel returns 2.



Set optical switch channels	<p>Return1: <OSW_OUT_OK></p> <p>Return2: <OSW_OUT_OVERFLOW></p>	
Query optical switch channels	<p>Send: <OSW_OUT_?></p>	Query command said optical switch the current channel Successful returned by the query return XX Said that the current channel.
	<p>Return: <OSW_OUT_XX></p>	
Query optical switch type	<p>Send: <OSW_TYPE_?></p>	Query information Successfully returns: model: GZ-2X12-SM-ST Fiber Type: SM Connector: ST
	<p>Return: <OSW_TYPE_GZ-2X12-SM-ST></p>	

Note: COM settings , Baud rate: 9600, Data bits: 8 bit, Stop bit: 1 bit , parity bit: None, Command error return “<OSW_ERROR>” .

Operation

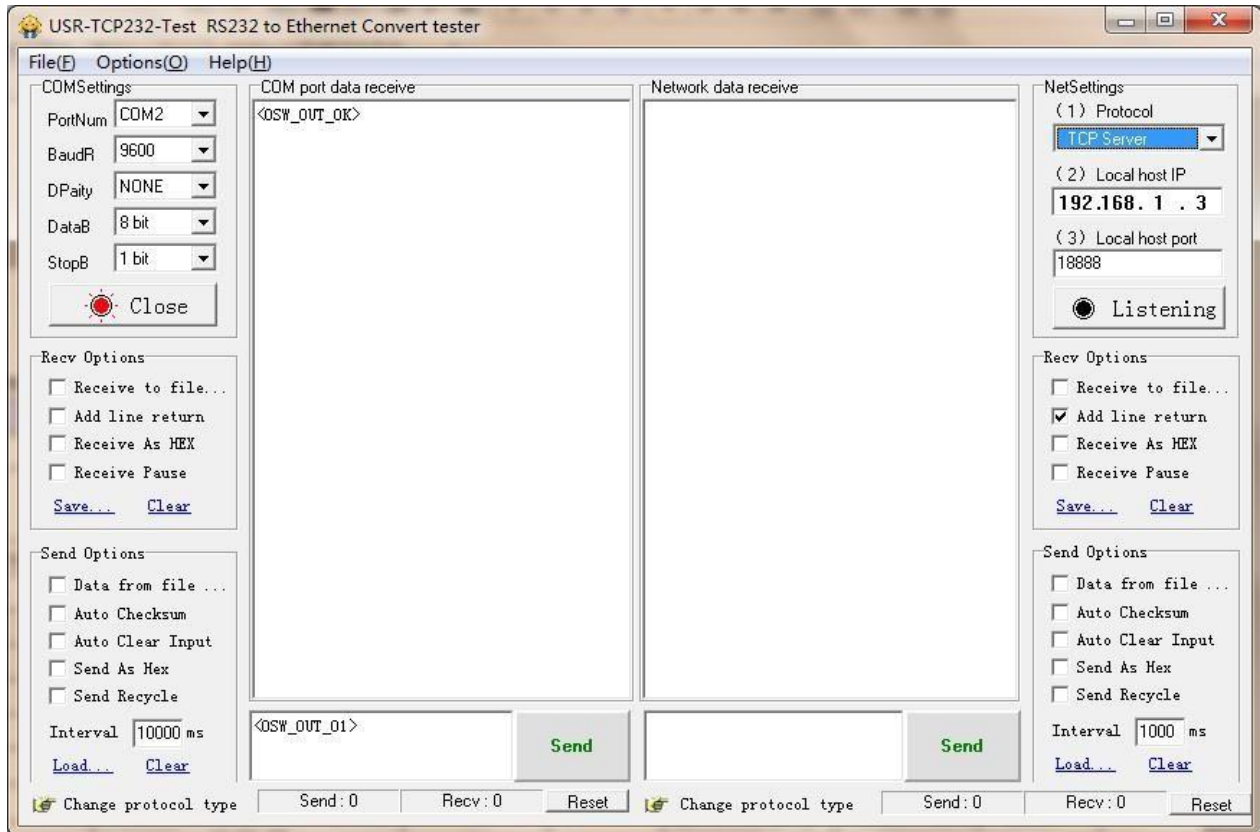
(1) The optical switch transmits the command to control the optical switch through RS232 serial communication. The optical switch receives the command successfully and returns the response.



(2) To program the switch directly over USB (RS232 control), we would throw in a DB9 to USB adaptor (connector), and then the switch can be connected to the USB port on your device.

(3) The optical switch is bidirectional in operation.

Software Control Chart (For Reference Only)



Contact us: sales@gaotek.com

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience.