



Optical Switch • QOS5000 Series

Technical Specifications

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## **1.0 PRODUCT DESCRIPTION**

The QOS5000 has very low insertion loss, typically  $\leq 0.6\text{dB}$ , maximum of  $\leq 1.0\text{dB}$ , with advanced optical level monitoring. It is available in 3 versions:  $1\times 2$ ,  $2\times 1$  or  $2\times 2$  in a standard 1RU 19" housing. The unit can be changed from automatic mode to manual switching on the front panel. The optical power passed through can also be displayed on the front LCD panel.

## **2.0 PRODUCT FEATURES**

- High Speed optical level sampling for better resolution.
- Standard RS232 communications port.
- Integrated SNMP network management function.
- The switch mode can be either automatic or manual.
- Switching optical reference level can be set by the front panel or across the network.

## **3.0 MAIN APPLICATIONS**

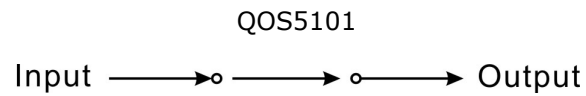
The QOS5000 optical switch's main application is in fiber links that require high reliability. For example, it can be used with dual CATV 1310nm or 1550nm Optical transmitters to provide redundant paths, or as an EDFA hot-backup automatic switch. The QOS5000 optical routing switch is mainly used to create a protected optic path, with a self-healing ring network. In addition, it can also be used to dynamically reconfigure CADM and OXC networks, with system monitoring and failure protection.

## **4.0 PRODUCT SERIES**

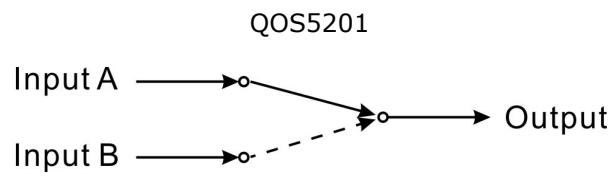
- QOS5101 ( $1\times 1$ ) Optical Switch
- QOS5201 ( $2\times 1$ ) Optical Switch
- QOS5102 ( $1\times 2$ ) Optical Switch
- QOS5202 ( $2\times 2$ ) Optical Switch

## 5.0 SWITCHING OPTIONS

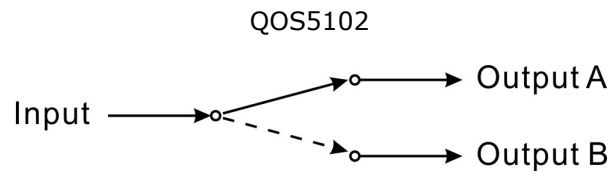
- 1×1 switch mode



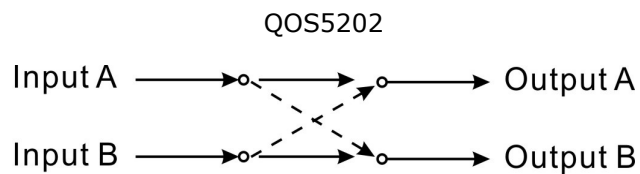
- 2×1 switch mode



- 1×2 switch mode



- 2×2 switch mode



## 6.0 TECHNICAL SPECIFICATIONS

Performance	Index	Supplement
Working wavelength	1260~1360nm	QOS5000
	1510~1610nm	QOS6000
	1310nm	QOS3000
Input power range	-30 ~ -20dBm	QOS5000D
	-10 ~ +10dBm	QOS5000C
	+10 ~ +30dBm	QOS5000E
Max insertion loss	2.0dB	
Switch loss	$\leq 1.0\text{dB}$ (typical, $\leq 0.8\text{dB}$ )	
Splitter loss	$\leq 0.5\text{dB}$	
Connector loss	$\leq 0.5\text{dB}$	X 2
Reflectivity	$\geq 55\text{ dB}$	
Polarization dependent loss	$\leq 0.1\text{dB}$	
Repeatability	$\leq \pm 0.02\text{dB}$	
Switching time	$\leq 10\text{ms}$	
Power Requirements	95~250 VAC	
Optical connector	FC/APC & SC/APC	
Max Optical power	$\leq 500\text{mW}$	
Housing Size	19×1.75×14.2"	