

OptiConcepts 1xN Packaged Switch



Key Features & Benefits

- Low Loss, Reliable Optical Switching
- Compact Desktop Design
- Bi-Directional
- USB Powered
- Controlled via Manual Switch or External Computer

Markets & Applications

- Lab Testing
- Education
- Multi Channel Fiber Monitoring
- Data Center Testing
- Manufacturing
- Research and Development

Overview

OptiConcepts 1xN Packaged Switch provides electronically controlled optical light paths for fiber optic routing and testing purposes. The 1xN Packaged Switch is a desktop unit controlled via manual switch or USB linked external computer. The design offers channel selections between a single input and various output ports from 1x2 to 1x32 configurations. This unit offers bi-directional operation with low loss signal pass through. Switch functions can be controlled by manually pushing a button or via remote computer control. Application of uses include lab testing, fiber monitoring, and research and development. The small, lightweight design allows for easy portability, storage, and reduced bench-top space.

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1xN Packaged Switch



Specifications

Physical		
1 x N ≤ 4	Weight: ~1 lb. (.45kg)	Dims: 6.3* x 4.1 x 1.2in (16 x 10.4 x 3.05cm)
1 x N ≤ 16	Weight: ~3.9 lb. (1.8kg)	Dims: 10* x 7 x 2.5in (25.4 x 17.78 x 6.35cm)
Exterior Construction		Anodized Aluminum
*dimension will increase based on connector adapter		
Environmental		
Operational Temperature		0° to 50°C
Storage Temperature		-10° to 60°C
Humidity		≤95% RH, Non Condensing
Electrical		
Power Requirements		DC, 5V USB Supply
User Input Device		Mini USB
Optical		
Insertion Loss (dB):		
N ≤ 16	Typical: 0.6 Max: 0.8	
N ≤ 32	Typical: 0.8 Max: 1.0	
Wavelength Range (nm):		MM: 850/1300nm±40; SM: 1260-1650nm
Test Wavelength (nm):		MM: 850/1300nm; SM: 1310/1550nm
Return Loss (dB):		MM ≥ 30; SM ≥ 50
Crosstalk (dB):		MM ≥ 55; SM ≥ 70
PDL (dB):		
N ≤ 16	≤ 0.05	
N ≤ 32	≤ 0.1	
WDL (dB)		≤ 0.25
TDL (dB)		≤ 0.25
Repeatability (dB):		
N ≤ 16	≤ ±0.02	
N ≤ 32	≤ ±0.05	
Durability (Cycles):		≥ 10 Million
Switching Time (ms):		≤ 10 (Sequence switch time of adjacent channel)
Optical Power (mW):		≤ 500
Channels:		1-32; more available upon request
Switching Control:		Manual Button or Remote Computer Control
Connector Types:		FC, SC, LC, MTP/MPO; including angled variations

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Ordering Information

Part Number	Description
FWU-SW1XNABCD	Packaged 1xN USB Switch

N= Number of Channels 1-32

A=Fiber Type S=Single Mode 5=50um 6=62.5um

B=Common Connector Port 1=FC 2=FCA 3=SC 4=SCA 5=ST 6=LC 7=LCA 8=MPO/MTP

C=Output Connector Port 1=FC 2=FCA 3=SC 4=SCA 5=ST 6=LC 7=LCA 8=MPO/MTP

D=Switch Control M=Manual Button R=Remote Computer Control

[1XN Packaged Switch Part Number Example]

FWU-SW1X4S44M - USB Switch 1X4 Single-mode SCA Connector Ports, Manual Button Control

Quality Statement

OptiConcepts is committed to providing high quality, easy to use test equipment by integrating customer needs into world-class engineered products and systems.



designed and built in the USA

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