

OPTICAL CIRCUIT SWITCHES

D1x2 Mechanical Optical Switch

Dual-band 1x2 switch handling 850/1300 nm or 1310/1550 nm pairs, with 55 dB crosstalk and 8 ms switching.



Key Features

- Dual-band operation: 850/1300 nm or 1310/1550 nm
- Crosstalk ≥ 55 dB on single-mode
- Switching time ≤ 8 ms
- Compact 27.0 x 12 x 8.2 mm package
- Wide -20°C to $+70^{\circ}\text{C}$ operating range
- 3 V or 5 V low-voltage control

Applications

- Optical path switching and route selection
- Network protection and redundancy switching
- Fiber monitoring and remote test access
- Automated test and measurement equipment

Overview

The D1x2 switches two wavelength bands at once, in either an 850/1300 nm or a 1310/1550 nm pairing. A single actuation moves both bands together, which is what a bidirectional or dual-window link needs — the alternative is two switches that have to be kept in step.

Crosstalk suppression reaches 55 dB on single-mode fiber and switching completes within 8 ms. The package measures 27.0 x 12 x 8.2 mm and runs from 3 V or 5 V across a -20°C to $+70^{\circ}\text{C}$ range.

Specifications

Optical Performance

PARAMETER	VALUE	UNIT	CONDITIONS
Number of Channels	D1 x 2		
Operating Wavelength	850 & 1300, or 1310 & 1550	nm	
Insertion Loss	≤ 1.5	dB	
Crosstalk	≥ 55	dB	Single-mode
Switching Time	≤ 8	ms	

Mechanical & Electrical

PARAMETER	VALUE	UNIT
Dimensions	27.0 x 12 x 8.2	mm
Operating Voltage	3 V or 5 V	
Operating Temperature	-20 to +70	°C

Order or request a quote

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Specifications are subject to change without notice and do not constitute a warranty. Confirm all parameters with Lightwit Photonics sales before ordering.