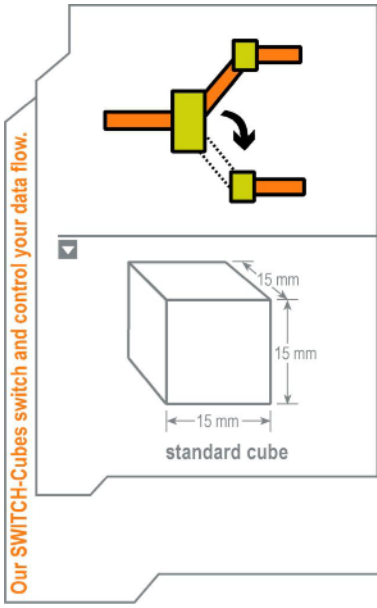
# SWITCH-Cubes
# >Electro-mechanical switch, 2x4, single mode and multi mode

## Features

- Wide choice of configurations
- Compact size
- Low crosstalk
- RoHS compliance


## Applications

- Optical communications
- Network monitoring
- Automatic optical testing
- Test equipment
- Research and development
- Signal routing

## Description

Cubo´s 2x4 Optical Switches are based on opto-mechanical technology with proven reliability. With the state-of-the-art technology, the performance is optimized for a wide range of fiber-optic applications.

Design is based on worldwide telecommunications, data communications, system monitoring and computer testing requirements.

Fully complied with Telcordia GR-1073-CORE and complied with applicable items of Telcordia GR-1221-CORE standard.

## Technical Specifications

### Electro-Optical Characteristics

| Parameter | single mode | multi mode |
|---|---|---|
| Wavelength Range (nm) | 1280 - 1340<br>1520 - 1625 | 850 / 1300 |
| Insertion Loss (dB), typ. | ≤0.6 | ≤0.5 |
| Insertion Loss (dB), max. | ≤1.0 | ≤0.8 |
| Back Reflection (dB), typ. | ≤-45 | - |
| PDL (dB) | ≤0.1 | - |
| Cross-Talk (dB) | ≤-60 | |
| Switching Time (ms) | ≤5 | ≤5 |
| Repeatability (dB) | ±0.05 | |





Cube Optics AG

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### Mechanical & Environmental

| Parameter | 2x4 |
|---|---|
| Operating Temperature Range (°C) | - 5 - 70 |
| Humidity (%RH) | 5 - 85 |
| Durability (cycles) | > $10^7$ |
| Fiber pigtail | S. M. Fiber |
| Dimensions (HmmxWmmxLmm) | 8.2x11x30 |
| Weight (g) | < 20 |

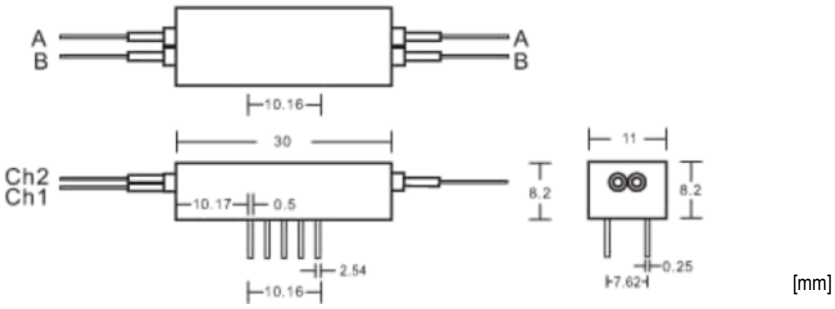
1. All Specifications referenced without connectors
2. Measured at 1550 nm
3. Add 0.2 dB for Insertion loss in 1310/1550 nm dual wavelength

### Electrical Characteristics

| Parameter | 2x4 |
|---|---|
| Coil Resistance (Ω) | 125 ( ±10%) |
| Operating Current (mA), typ | 40 ( ±10%) |
| Operating Voltage (V), typ. | 5.0 |
| Operating Voltage (V), range | 4.5 - 5.5 |
| Power-Consumption (W), typ * | 0.2 |

* When + 5V DC signal is applied to only coil

## Outline Drawing




[mm]

## Ordering Information

| CUBO | - | | - | | - | | - | | - | | - | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Number of Inputs**
2

**Number of Outputs**
4

**Operating Function**
L = Latching
N = Non-Latching

**Fiber type**
9 = 9/125 µm, Corning SMF-28
50 = 50/125 µm
62 = 62.5/125 µm

**Fiber cabling**
B = Bare fiber
L = 0.9 mm Loose Tube

**Connector Type**
1 = none
2 = FC/PC
3 = FC/APC
4 = SC/APC
5 = SC/PC
6 = MU/PC
7 = ST/PC
8 = LC/PC
9 = SC/UPC
A = MT/RJ
B = MU/UPC
C = FC/UPC

This specification might be changed without notice.

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