# specification

**Product Name: Desktop Optical Switch**

**Product model: 7205-1*N**

**File number: SPEC0058AC1**

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| Specification Document Version History | | | | | |
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## product description ;

The 7205-1*N desktop optical switch is an optical path control device that manages and switches optical pathways, playing a crucial role in optical communication applications. Its primary applications include: multi-channel optical monitoring in optical transmission systems, automatic switching of multiple light sources/detectors in LANs, and dynamic multi-point monitoring systems for optical sensing; testing systems for optical fibers, optical components, network infrastructure, and field engineering cables; as well as optical component assembly and calibration.

## Product Features

1. Features include low insertion loss and fast switching speed

2. Equipped with an LCD display for intuitive data presentation, facilitating user operation.

3. The "device address" can be configured to enable users to control multiple optical switch instruments with a single serial port when serial port resources are limited.

4. The baud rate for serial communication can be configured according to actual needs, with seven selectable options: 2400,4800,9600,14400,19200,57600, and 115200.

5. Optical path switching can be configured through three methods: panel buttons, serial port commands, and Ethernet. Additionally, button operations can be locked via serial port commands.

6. Automatic scanning can be configured with a maximum switching interval of 99 hours 59 minutes 59 seconds. Additionally, the "starting channel" and "ending channel" for scanning can be set.

## parameter valve

| class | parameter values | |
|---|---|---|
| **model** | 7205-1*N-SM | 7205-1*N-MM |
| **operating wavelength** | 1260 ～ 1650nm | 532~980nm |
| **test wavelength** | 1310 / 1550nm | 850nm |
| **insertion loss** | Typ: ＜1.0dB，Max: ＜1.3 dB | |
| **repetitiveness** | ≤±0.05 dB | |
| **return loss** | SM≥50、MM≥30 | |
| **cross fire** | SM≥55、MM≥35 | |
| **wavelength-dependent loss** | ≤0.25 | |
| **polarization-dependent loss** | ≤0.05 | |
| **switching period** | ≤ 10ms (sequential adjacent handover) | |
| **Type of optical fiber** | SM（9/125um） | MM（50/125um、62.5/125um） |
| **Connector type** | FC/APC FC/PC | |

| | |
|---|---|
| **Monitoring port** | RJ45、RS-232　USB |
| **working power supply** | AC: 85 ～ 264 V（50/60Hz） |
| **working temperature** | -10 ～ + 60℃ |
| **Storage temperature** | -40 ～ + 80(C |
| **size** | 245（W）× 320（D）× 110（H）mm |

## Product illustration:

**1. LCD screen type:**

(1) LCD display screen: Display of device address, current channel, and related information.

(2) Power indicator light: Indicates the working power supply.

(3) Power indicator light Error: Error indication.

(4) ▲ — Up arrow key; ▼ — Down arrow key; Enter — Confirm key; Esc — Cancel key.

(5) Optical interface specifications: The I/O ports on the device panel are common ports, with channel numbers 1, 2, 3,..., N assigned to each port.

**2. Full-key layout:**

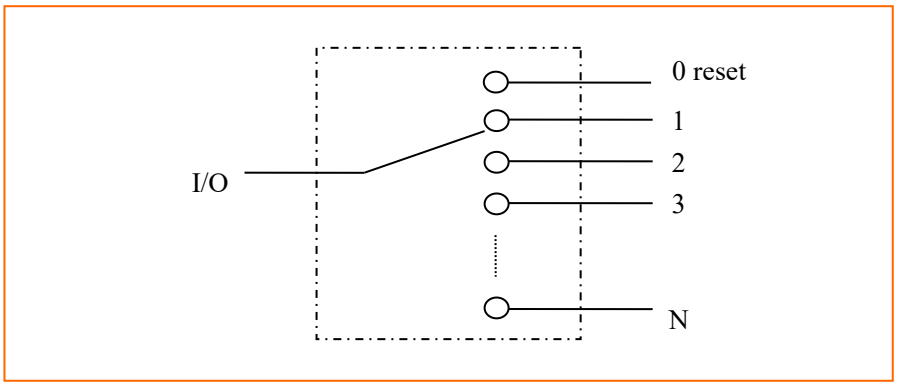
(1) Power indicator light: Indicates working power supply.

(2) Front panel LED/KEY indicator light description: 1, 2, 3...N represent the corresponding buttons and LED indicators for each channel. Pressing these buttons switches the device to the corresponding link, with the corresponding LED light illuminating.

(3) Optical interface description: The I/O ports on the device panel are common ports, with 1, 2, 3...N indicating

channel numbers respectively.

## Optical path diagram:




7205-1*N Diagram of internal optical path for desktop optical switch

## Order Information: GP-7205-1*N-A-B-C-D-E-F-G

**Example: GP-7205-1*N-1-L-123-SM-FS-220-FA**

| A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| **Light switch type** | **display mode** | **control method** | **Type of optical fiber** | **operating wavelength** | **source** | **connector** |
| 1: Motor<br>2: Relay<br>3: MEMS<br>4: Magnet<br>12: Motor/ Relay<br>X: Others | L:LCD<br>K:KEY | 1: Ethernet<br>2: RS232<br>3:USB to UART<br>4: RS485<br>5: USB HID | SM: SM,9/125<br>M5: MM,50/125<br>M6: MM,62.5/125<br>X: Others | 85: 850±40nm<br>O: O band(1260~1360nm)<br>C: C band(1530~1565nm)<br>L: L band(1565~1625nm)<br>U: U band(1625~1675nm)<br>FS: 1260~1650nm<br>FS2: 1400~1700nm | 220: AC 220V | 00: None<br>LU: LC/UPC<br>LP: LC/PC<br>LA: LC/APC<br>FU: FC/UPC<br>FP: FC/PC<br>FA: FC/APC<br>SU: SC/UPC<br>SP: SC/PC<br>SA: SC/APC<br>STP: ST/PC<br>STA: ST/APC<br>X: Others |