## 0506 Electro-mechanical Switch

## [1100-S

## 1x8 Mechanical Fiber Optic Switch

This mechanical fiber optic switch connects optical channels by redirecting an incoming optical signal into a selected output fiber. This is achieved using a patent pending opto-mechanical configuration and activated via an electrical control signal. The mechanical operation offers ultra-high reliability and fast switching speed as well as bi-directionalal performance. The fiberoptic switches are true switching solutions for optical networking applications.

## FEATURES

- Low Insertion Loss
- Parallel Interface


## USE IN

- Ring Network
- Remote Monitoring in Optical Network

| Insertion Loss | 0.8 dB typ.; 1.0 dB max. |
| :--- | :--- |
| Operating Wavelength | $850 / 1310 / 1550 / 1625 \mathrm{~nm}$ |
| Channel Crosstalk | 55 dB min. |
| Return Loss | 50 dB min. |
| Polarization Dependent Loss | 0.05 dB max. |
| Wavelength Dependent Loss | 0.25 dB max. |
| Temperature Dependent Loss | 0.25 dB max. |
| Repeatability | $\pm 0.02 \mathrm{max}$. |
| Power Supply | $5 \mathrm{~V} / 12 \mathrm{~V}$ |
| Switch Time | $8 \mathrm{~ms} \mathrm{max}$. |
| Transmission Power | 500 mW max. |
| Fiber Type | SM Fiber |
| Dimension | $135 \times 64 \times 32 \mathrm{~mm}(1<\mathrm{N} \leq 12)$ |
| Operating Temperature | $-20^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
| Storage Temperature | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |

Order notes to our customers: The default parameters are as follows. For special needs, please contact sales.

1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.
2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.

## 0506 Electro-mechanical Switch

## [1IICD-S

## MECHANICAL DRAWING

Example Dimension: $135 \times 64 \times 32 \mathrm{~mm}(1 \times N, n \leq 12$, DB-9 male)


Channel Selection Table

| Max Channel | Input |  |  |  |  |  |  |  | Active Channel |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | /RESET | D6 | D5 | D4 | D3 | D2 | D1 | D0 |  |
| $\begin{aligned} & \mathrm{N} \\ & =16 \end{aligned}$ | 0 | X | x | X | X | x | x | X | 0 reset |
|  | 1 | X | x | x | 0 | 0 | 0 | 0 | com $\rightarrow 1$ |
|  |  | X | X | X | 0 | 0 | 0 | 1 | com $\rightarrow 2$ |
|  |  | x | x | x | 0 | 0 | 1 | 0 | com $\rightarrow 3$ |
|  |  | x | x | x | $\ldots$ | ... | ... | ... | ... |
|  |  | x | x | x | 1 | 1 | 1 | 1 | com $\rightarrow 16$ |

Optical Route


DB-9 male connector (max.1x8)

| Pin No. | signal Name | I/O | Description |
| :--- | :--- | :--- | :--- |
| 1 | D0 | Input | TTL, Channel selection bit 0 |
| 2 | D1 | Input | TTL, Channel selection bit 1 |
| 3 | D2 | Input | TTL, Channel selection bit 2 |
| 4 | D3 | Input | TTL, Channel selection bit 3 |
| 5 | RESET | Input | TTL, Low level reset to channel 0. <br> Highh level means channel selection bits are effective. |
| 6 | /READY | Onput | TTL, Ready (High=Not ready, Low=Ready). |
| 7 | ERROR | Onput | TTL, Error (High=Error, Low=Not error). |
| 8 | GND | Input | Ground |
| 9 | $+5 V D C$ | Input | $5.0 \pm 5 \%$ VDC Power Supply (max 550 mA ) |

Order notes to our customers: The default parameters are as follows. For special needs, please contact sales.

1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.
2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.
