1x12 Optical Switch Module


MTP, SC or E-2000 output connectors


Continuous OTDR testing on up to 12 fibers
Accelerated ribbon-fiber testing

Multiply Speed and Power
Multiply your measurement power by achieving highly accurate, repeatable fiber-to-fiber switching with the FTB-9100 Optical Switch. Combine the FTB-9100 Optical Switch, an OTDR module and EXFO's advanced FTB-400 Universal Test System, to automatically perform singleor dual-wavelength OTDR acquisitions on up to 12 fibers.

Stop Waiting, Start Testing
The optical switch module performs reliable one-stop batch fiber testing or ribbon-fiber testing by switching between one common port and 12 input/output ports. Choose from three output connector types: MTP (ribbon), SC or E-2000. With only one connection to handle, the MTP connector and patchcord configuration cuts setup time and speeds up testing.

Get Ahead on High-Volume Acquisitions
Efficient software is essential for realizing productivity goals. ToolBox OTDR software automatically delivers accurate, high-volume testing. Simply press the Start button and let the FTB-9100 Optical Switch direct the OTDR signal from one fiber to another. ToolBox OTDR software automatically acquires and stores test data, then generates an integrated result table based on Pass/Fail thresholds.

Optical Switch Specifications ${ }^{1}$

| Model | FTB-9100-01-12-B-XX | FTB-9100-01-12-B-92-XX | FTB-9100-01-12-C/D-XX |
| :---: | :---: | :---: | :---: |
|  | Singlemode | Singlemode | Multimode |
| Number of channels | 1x12 | 1x12 | 1x12 |
| Connector type | SC/PC (54), E-2000/PC (95) SC/APC (88), E-2000/APC (96) | MTP/APC <br> (female connector) ${ }^{2}$ | SC/PC (54) |
| Insertion $\operatorname{loss}^{3}(\mathrm{~dB})$ | 0.7 | 0.9 | 0.5 |
| Backreflection ${ }^{4}$ (dB) | $\begin{aligned} & -40 \text { (PC) } \\ & -55 \text { (APC) } \end{aligned}$ | -55 | -24 |
| Repeatability ${ }^{5}$ (dB) | $\pm 0.03$ | $\pm 0.03$ | $\pm 0.03$ |
| Operating wavelengths (nm) | 1290 to 1650 | 1290 to 1650 | 780 to 1350 |
| Polarization dependent loss ( dB ) | $0.05{ }^{6}$ | $0.05{ }^{6}$ | - |
| Crosstalk (dB) | -80 | -80 | -80 |
| Switch life | 10 million cycles minimum (excluding connector cycles) |  |  |
| Maximum optical input power | 24 dBm | 24 dBm | 24 dBm |

## Optical Switch General Specifications

Temperature

| operating storage | $\begin{aligned} & 10^{\circ} \mathrm{C} \text { to } 40^{\circ} \mathrm{C} \\ & -20^{\circ} \mathrm{C} \text { to } 60^{\circ} \mathrm{C} \end{aligned}$ | $\left(50^{\circ} \mathrm{F}\right.$ to $\left.104{ }^{\circ} \mathrm{F}\right)$ <br> ( $-4^{\circ} \mathrm{F}$ to $140^{\circ} \mathrm{F}$ ) |
| :---: | :---: | :---: |
| Relative humidity | $80 \%$ max. non-condensing |  |
| Size ( $\mathrm{H} \times \mathrm{W} \times \mathrm{D}$ ) | $9.6 \mathrm{~cm} \times 5.1 \mathrm{~cm} \times 26.0 \mathrm{~cm}$ | (3 $3 / 4$ in $\times 2$ in $\times 101 / 4 \mathrm{in}$ ) |
| Weight | 1.0 kg | (2.2 lb) |

## NOTES

1. All specifications are for a temperature of $23^{\circ} \mathrm{C}\left(73^{\circ} \mathrm{F}\right)$ with an SC/PC connector unless otherwise specified.
2. MTP connectors are sensitive to dirt. Protection and cleanup before and after each use is recommended.
3. Typical insertion loss per module, excluding connectors, measured at singlemode wavelengths of 1310 nm and 1550 nm .
4. Typical backreflection measured at singlemode wavelengths of 1310 nm and 1550 nm , excluding connectors.
5. Typical repeatability values for 100 cycles per switch module at a constant temperature for 1 hour with a stabilized source/power meter at singlemode wavelengths of 1310 nm and 1550 nm .
6. Typical.
7. Configuration 54-SC/PC is offered for singlemode or multimode fiber types.
8. Configuration 88-SC/APC is offered for singlemode fiber types only.
9. Configuration E-2000 is offered for singlemode fiber types only.

## Ordering Information

| FTB-9100-01-12-X-XX |  |
| :--- | :--- |
| Fiber | Input/Output connector |
| $\mathrm{B}=9 / 125 \mu \mathrm{~m}$ singlemode | $54=\mathrm{SC} / \mathrm{PC}^{\top}$ |
| $\mathrm{C}=50 / 125 \mu \mathrm{~m}$ multitiode | $88=\mathrm{SC} / \mathrm{PC}^{8}$ |
| $\mathrm{D}=62.5 / 125 \mu \mathrm{~m}$ multimode | $95=\mathrm{E}-2000 / \mathrm{PC}^{9}$ |
|  | $96=\mathrm{E}-2000 / \mathrm{APC}^{9}$ |

## Example:

FTB-9100-01-12-C-54


Input connector
EI-EUI-28 $=$ UPC/DIN $47256 \quad$ EI-EUI-95 $=$ UPC/E-2000
EI-EUI-76 = UPC/HMS-10/AG EA-EUI-28 = APC/DIN 47256
EI-EUI-89 = UPC/FC narrow key
EA-EUI-89 = APC/FC narrow key
EI-EUI-90 = UPC/ST
EA-EUI-91 = APC/SC
EI-EUI-91 = UPC/SC
EA-EUI-95 = APC/E-2000

## Example:

FTB-9100-01-12-B-92-EI-EUI-89

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[^0]:    EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design,
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