

SBM (Single Fiber Fixed MUX DEMUX Card)

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Details

The single fiber MUX / DEMUX board (SBM) launched by D Tech Trading is specially designed for DWDM network applications with multiple wavelengths. It can multiplex different wavelengths of optical onto one optical fiber or separate multiple optical channels multiplexed on the same optical fiber by wavelength. Based on thin film filter (TFF) technology, it works on ITU grid with 100GHz channel spacing. The wavelength of the ITU channel is optional. It supports serial connection of EDFA for single fiber bidirectional long-distance transmission with built in OSC monitoring channel.

Application case:

It is applicable to 4-channel and 8-channel DWDM optical signal MUX and DEMUX in single fiber transmission

Product specification:

| Specification | 4 channel | 8 channel |
|----------------------|--|--|
| Function | Support Mux&Deux of 4 DWDM optical signals | Support Mux&Deux of 8 DWDM optical signals |

| Specification | 4 channel | 8 channel |
|--|--|---|
| Channel number | 4?@100 GHz (board model as table 3) | 8?@100 GHz (board model as table 4) |
| Insertion loss | ?2 dB (?-IN to SIG-OUT/SIG-IN to ?-OUT) | ?3 dB (?-IN to SIG-OUT/SIG-IN to ?-OUT) |
| 3dB spectral width | >75GHz | >75GHz |
| Adjacent channels isolation | >25dB | >25dB |
| Non-adjacent channels isolation | >35dB | >35dB |
| OSC channel | 1491nm/1511nm | |
| Single fiber bidirectional coupling insertion loss | ?1.5 dB (RC to LINE/LINE to TC) | ?1.5 dB (OSC-A to LINE/LINE to OSC-D) |
| Slot number | 1 slot | |
| Power monitoring | Support optical power monitoring of mux port (SIG) | |

| Specification | 4 channel | 8 channel |
|-------------------|---|--|
| Indicator light | Support optical power indicator light of mux port (SIG) | |
| Extended function | Support extended cascading, and use EXP port | Not support for docking during cascading |

Table 3: single fiber 4-channel fixed mux demux board

| Card Model | Port Range | Add Center Frequency Range (THz) | Drop Center Frequency Range (THz) |
|------------|------------------------------------|----------------------------------|-----------------------------------|
| SBM2242 | A22/D39, A23/D40, A24/D41, A25/D42 | 192.20~192.50 | 193.90~194.20 |
| SBM4222 | A39/D22, A40/D23, A41/D24, A42/D25 | 193.90~194.20 | 192.20~192.50 |
| SBM2646 | A26/D43, A27/D44, A28/D45, A29/D46 | 192.60~192.90 | 194.30~194.60 |

| Card Model | Port Range | Add Center Frequency Range(THz) | Drop Center Frequency Range (THz) |
|-------------------|------------------------------------|--|--|
| SBM4626 | A43/D26, A44/D27, A45/D28, A46/D29 | 194.30~194.60 | 192.60~192.90 |

| Card Model | Port Range | Add Center Frequency Range (THz) | Drop Center Frequency Range (THz) |
|-------------------|------------------------------------|---|--|
| SBM2246 | A22/D39, A23/D40, A24/D41, A25/D42 | 192.20~192.90 | 193.90~194.60 |
| | A26/D43, A27/D44, A28/D45, A29/D46 | | |
| SBM4622 | A39/D22, A40/D23, A41/D24, A42/D25 | 193.90~194.60 | 192.20~192.90 |
| | A43/D26, A44/D27, A45/D28, A46/D29 | | |