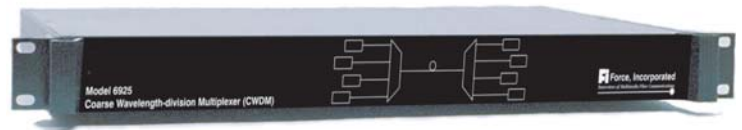


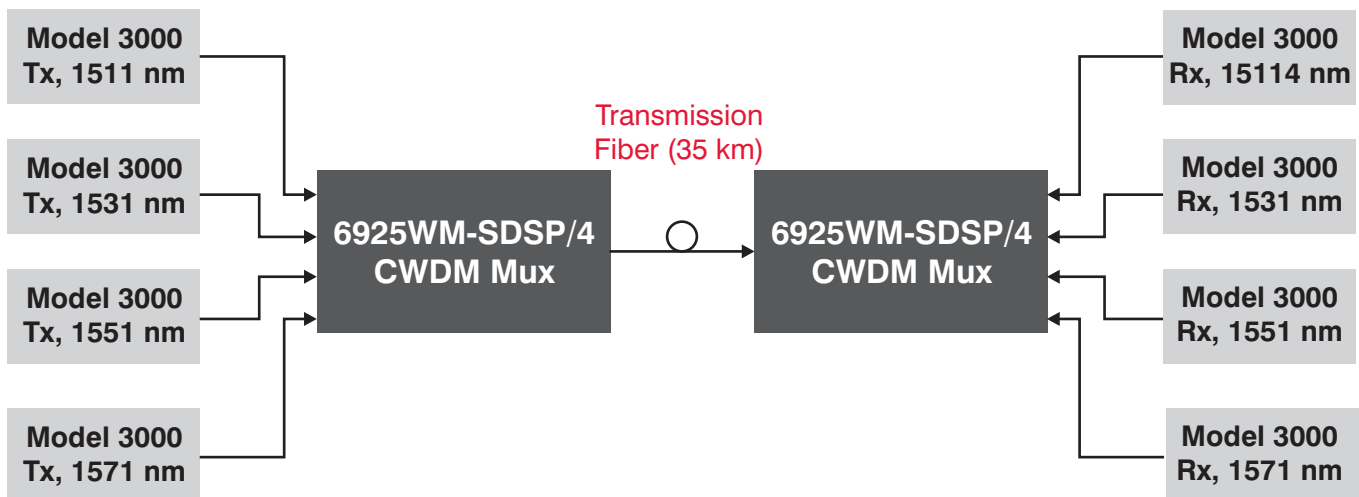
### Coarse Wavelength-division Multiplexer

- Model 6925 offers low insertion loss and polarization-dependent loss.
- High channel-to-channel uniformity allows excellent stability and reliability.
- Great for use in high-speed communication and long-haul telecommunication networks.  
Extends the capacity of existing networks.



*Model 6925 CWDM*

The Force Model 6925 Coarse Wavelength-division Multiplexer (CWDM) is an all-fiber, bidirectional multiplexer/demultiplexer. The CWDM allows four, six, or eight channels to be stacked in the 1550 nm region of optical fiber. The Model 6925 features low insertion loss and low polarization-dependent loss. The units operate using single-mode fiber, and may be configured for unidirectional or bidirectional four, six, or eight channel transmission. The Model 6925 implements higher channel-to-channel isolation to ensure that no interference occurs between channels in a bidirectional configuration. CWDM technology increases the capacity of the embedded fibers, allowing multiple video, audio, and data channels to be transmitted over one fiber, while maintaining system performance and enhancing transport systems. The Model 6925 is an excellent choice for addressing the increased need for efficient and capable data transmission.



# Specifications and Ordering Information

## Optical Characteristics\*

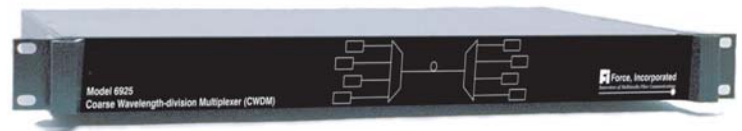
|                               | Min                    | Typ   | Max   | Units |
|-------------------------------|------------------------|-------|-------|-------|
| <b>4 Channel Models</b>       |                        |       |       |       |
| Center Wavelengths            | 1511, 1531, 1551, 1571 |       |       | nm    |
| 0.5 dB Passband               |                        | 15    |       | dB    |
| Ripple of Passband            |                        | 0.4   |       | dB    |
| Insertion Loss                |                        | 2.0   | 2.5   | dB    |
| Channel Uniformity (1)        |                        |       | 1.2   | dB    |
| Isolation of Adjacent Ch.     | 25                     |       |       | dB    |
| Isolation of Non-Adjacent Ch. | 40                     |       |       | dB    |
| Directivity                   | 55                     |       |       | dB    |
| Polarization Dependent Loss   |                        |       | 0.1   | dB    |
| Return Loss                   | 45                     |       |       | dB    |
| PMD                           |                        |       | 0.1   | ps    |
| Thermal Stability             |                        |       | 0.006 | dB/°C |
| Optical Power                 |                        |       | 250   | mW    |
| <b>6 Channel Models</b>       |                        |       |       |       |
| Center Wavelengths            | 1471, 1491, 1511, 1531 |       |       |       |
|                               | 1551, 1571             |       |       | nm    |
| 0.5 dB Passband               |                        | CW ±7 |       | nm    |
| Ripple of Passband            |                        | 0.3   |       | dB    |
| Insertion Loss                |                        | 2.8   | 3.4   | dB    |
| Channel Uniformity (1)        |                        |       | 1.2   | dB    |
| Isolation of Adjacent Ch.     | 28                     |       |       | dB    |
| Isolation of Non-Adjacent Ch. | 40                     |       |       | dB    |
| Directivity                   | 50                     |       |       | dB    |
| Polarization Dependent Loss   |                        |       | 0.2   | dB    |
| Return Loss                   | 45                     |       |       | dB    |
| PMD                           |                        |       | 0.1   | ps    |
| Thermal Stability             |                        |       | 0.006 | dB/°C |
| Optical Power                 |                        |       | 250   | mW    |

## Optical Characteristics cont.\*

|                               | Min                    | Typ | Max   | Units |
|-------------------------------|------------------------|-----|-------|-------|
| <b>8 Channel Models</b>       |                        |     |       |       |
| Center Wavelengths            | 1471, 1491, 1511, 1531 |     |       |       |
|                               | 1551, 1571, 1591, 1611 |     |       | nm    |
| 0.5 dB Passband               |                        | 15  |       | nm    |
| Ripple of Passband            |                        | 0.4 |       | dB    |
| Insertion Loss                |                        | 3.6 | 4.5   | dB    |
| Channel Uniformity (1)        |                        |     | 1.5   | dB    |
| Isolation of Adjacent Ch.     | 25                     |     |       | dB    |
| Isolation of Non-Adjacent Ch. | 40                     |     |       | dB    |
| Directivity                   | 55                     |     |       | dB    |
| Polarization Dependent Loss   |                        |     | 0.2   | dB    |
| Return Loss                   | 45                     |     |       | dB    |
| PMD                           |                        |     | 0.1   | ps    |
| Thermal Stability             |                        |     | 0.007 | dB/°C |
| Optical Power                 |                        |     | 250   | mW    |

## Environmental and Physical Characteristics\*

|                       | Min                | Typ | Max | Units |
|-----------------------|--------------------|-----|-----|-------|
| Operating Temp. Range | 0                  |     | +65 | °C    |
| Storage Temp. Range   | -40                |     | +85 | °C    |
| Humidity              | 5                  |     | 90  | %     |
| Weight                |                    | 5.5 |     | lbs   |
|                       |                    | 2.4 |     | kg    |
| Dimensions            | 19.0 x 1.75 x 11.8 |     |     | in.   |
|                       | 483 x 45 x 300 mm  |     |     |       |



Model 6925 CWDM Front and Rear Panel Views

(1) Channel uniformity is given at the center wavelength.

## CWDM and Optical Jumper P/N

| CWDM Options             | 4-ch.         | 6-ch.         | 8-ch.         |
|--------------------------|---------------|---------------|---------------|
| Mux, 1RU, SC/APC Conn.   | 6925WM-SDSP/4 | 6925WM-SDSP/6 | 6925WM-SDSP/8 |
| Demux, 1RU, SC/APC Conn. | 6925WD-SDSP/4 | 6925WD-SDSP/6 | 6925WD-SDSP/8 |

| Optical Jumper Options          | 1 Meter      | 3 Meters     |
|---------------------------------|--------------|--------------|
| SM Optical Jumper, SC/APC Conn. | 8000-0241-03 | 8000-0241-04 |

\*System performance specifications indicated for use with single-mode fiber. Contact Force for complete performance specifications.



**FORCE**

OPTICAL BROADCAST SYSTEMS

825 Park Street, Christiansburg, VA 24073

USA (800) 732-5252 • TEL (540) 382-0462 • FAX (540) 381-0392

csr-sales@forceinc.com • www.forceinc.com