

“Channel Surfer” 2-Channel Fiber Optic Multiplexer (WDM)

Model TC4001

- Single Mode Fiber Only
- Doubles Use of Existing Fiber Optic Cable
- Transparent to Data Format
- Passive Device - No External Power Needed
- Standalone or Rackmount



Single Card Unit



Dual Card Unit

The “Channel Surfer,” Model TC4001 Fiber Optic Wavelength Division Multiplexer, enables 1300nm and 1550nm wavelengths to be transmitted simultaneously on the same fiber optic cable. The direction of the optical signals can be in the same direction or opposite directions.

Transparent to incoming data, the TC4001 effectively doubles existing cable capacity by multiplexing two separate channels over one single mode fiber. Dual two-channel units are also available.

Each TC4001 unit separates incoming optical signals between 1300nm and 1550nm. Thus, a user needs to connect the TC4001 to a device (transceiver, modem, etc.) with a 1300nm single mode transmitter at one end and a 1550nm single mode transmitter at the other end.

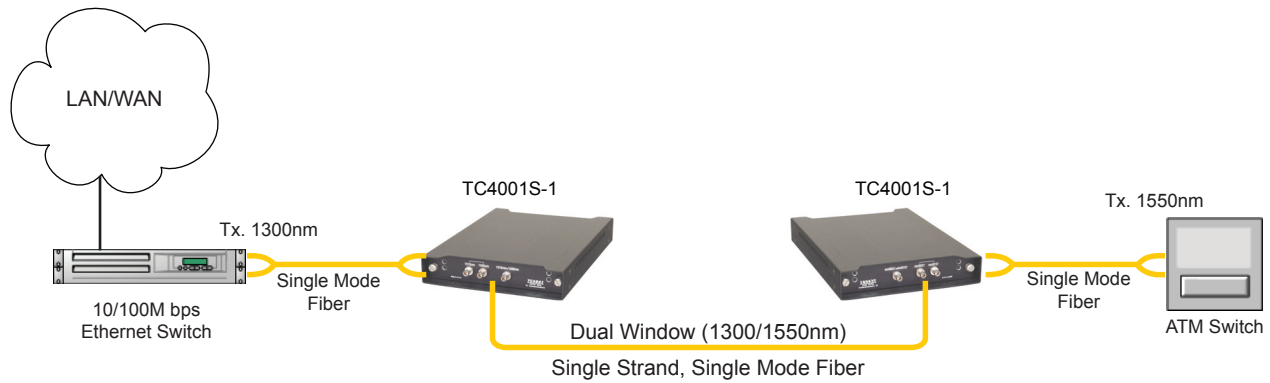
The TC4001 fiber optic connectors are ST, FC or SC. Because it is a passive device, it requires no power.



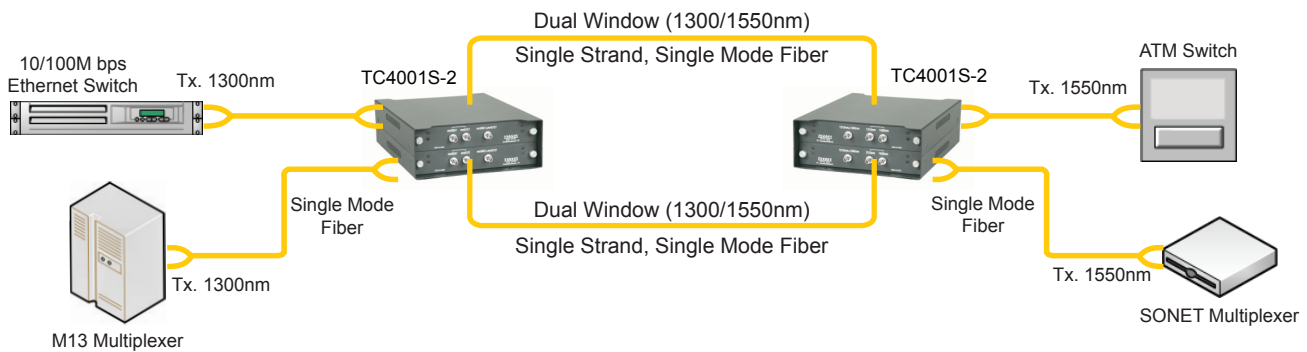
Applications

The TC4001 is ideal for situations where existing fiber optic cable capacity is limited. Because it doubles existing cable capacity by transmitting bi-directional signals over a single fiber, it eliminates the need to install additional fiber optic cable.

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Typical Application Using TC4001S-1 WDMs for Two-Way Communication via A Single Fiber Strand



Typical Application Using TC4001S-2 WDMs to Combine Four Fibers Into Two, Doubling The Fiber Capacity

Bandwidth

1310/1550nm SM+20nm

Insertion Loss (approximate)

Standard Version<0.6 dB
High Isolation (optional).....<0.8 dB

Isolation

Standard Version>16 dB
High Isolation (optional).....>30 dB

Directivity (Return Loss)

.....>50 dB

Typical Polarization Sensitivity (PSD)

.....<0.1 dB

Typical Thermal Stability

.....<±0.1 dB

Optic Ports

1310nm1
1550nm1
1310nm + 1550nm1
ConnectorsST, FC, or SC

Temperature

Operating-10°C to 50°C
Storage-40°C to 90°C
Humidity95% non-condensing

Physical (Standalone Unit)

Height.....(3.53 cm) 1.39"
Width.....(18.13 cm) 7.14"
Depth.....(24.89 cm) 9.80"
Weight.....(887 gm) 1.96 lbs



ISO 9001
QMI-SAI Global
#1045959

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