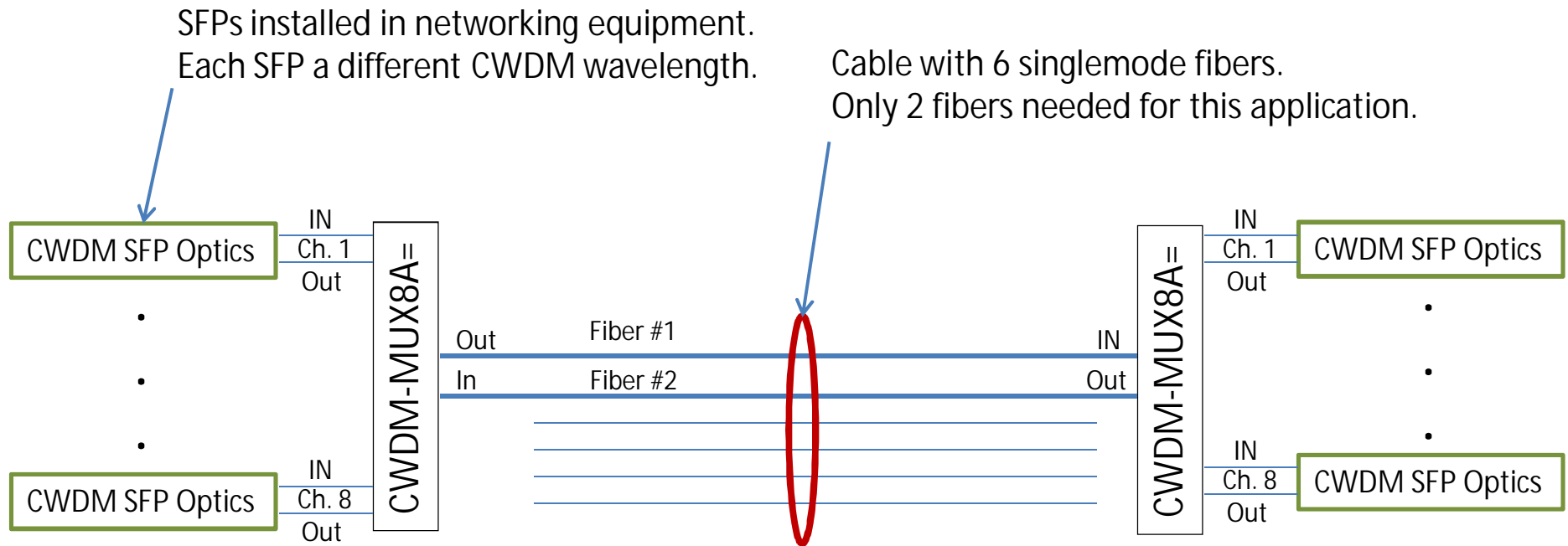


8 GE CHANNEL - CWDM EXAMPLE



7 km of fiber would equal approx 2dB of optical loss. Two CWDM MUX8A filters equals 4.4dB of loss. Minimum transmit power of CWDM SFP is 0dBm and maximum receiver sensitivity is -28dBm (-9dB is maximum input power) . Estimating losses and receive signal level: 0dBm(min. transmit power) - 2dB (fiber loss) - 4.4dB (CWDM filter loss) = -6.4dBm receive power. The optical receiver wants to see a input power of between -9 and -28dBm, thus I would add an extra 10dB of signal loss using optical attenuators (on fibers 1 & 2 or on each OUT port on the CWDM MUX8A) getting the signal in the correct operating range.

[Cisco CWDM Filters Data Sheet](https://www.cisco.com/en/US/prod/collateral/modules/ps5455/ps6575/product_data_sheet0900aecd8029d01b_ps708_Products_Data_Sheet.html)

https://www.cisco.com/en/US/prod/collateral/modules/ps5455/ps6575/product_data_sheet0900aecd8029d01b_ps708_Products_Data_Sheet.html

[Cisco CWDM SFP Optics Data Sheet](http://www.cisco.com/en/US/prod/collateral/modules/ps5455/ps6576/product_data_sheet0900aecd80582763.html)

http://www.cisco.com/en/US/prod/collateral/modules/ps5455/ps6576/product_data_sheet0900aecd80582763.html