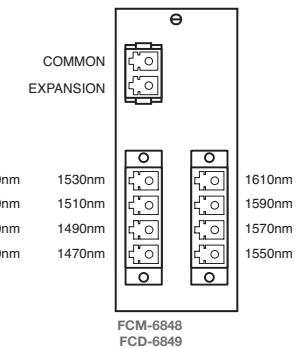
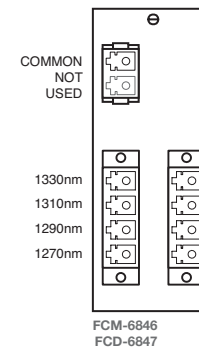
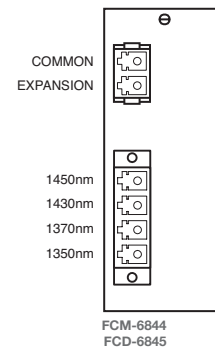
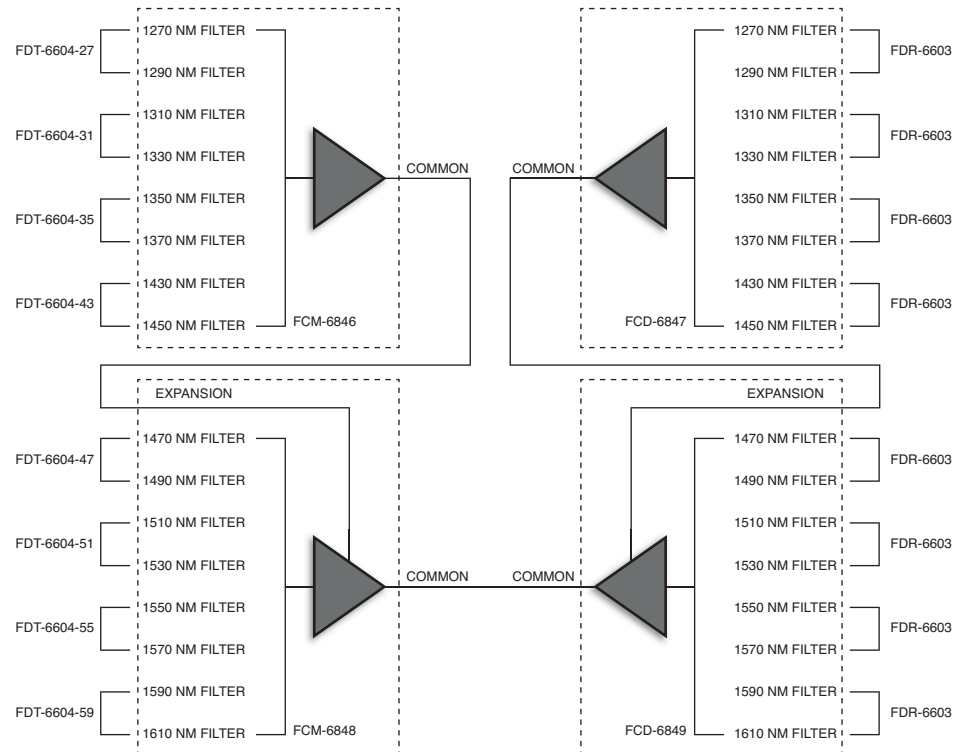


## Coarse Wave Division Multiplexing

Up to 16 channels of bit rate independent signals transmitted on a single fiber using wavelength division multiplexing.





### CWDM Optical MUX / DEMUX

Three sets of MUX / DEMUX modules are available: a 4 channel with expansion port, an 8 channel, and an 8 channel with expansion port. Using individual, or a combination of modules, allow for the creation of 4, 8, 12, or 16 channel systems. Modules with expansion ports enable the use of existing non-CWDM 1310nm lasers to create 5, 9 and 13 channel systems.

Wavelength MUX / DEMUX modules use passive wavelength filters. The modules fit the OG3-FR frame but draw no power. With no active components, modules offer a very high level of reliability.

### CWDM Transmitters and Receivers

Wave division multiplexing allows the use of multiple wavelengths of light on a single fiber, therefore allowing a single fiber to carry multiple signals. Each signal can run at its own bit rate and protocol, independent for the other signals.

Each electrical signal to be multiplexed into the final output must be converted to an optical signal with a unique wavelength by using different lasers on the transmitter. All Ross openGear® fiber transmitters have the option for CWDM output. The FDT-6604 dual electrical to optical transmitter comes in 8 product variants, utilizing DFB optical SFPs, with each card transmitting two neighboring wavelengths. The FST-6602 single transmitter, MUX-6258 audio mux and Ethernet products come in 16 different product variants. CWDM products are identified by a two digit suffix, which identifies the lower wavelength.

For example, dual channel products like the FDT-6604-27 will transmit 1270nm on its first channel, and 1290nm on its second channel. Single channel products like the MUX-6258-55 will output 1550nm.

Optical to electrical converters use a wide spectrum optical receiver, and will work with any wavelength. All optical to electrical converters are wide spectrum receivers and will function within a CWDM system, regardless of the transmitted wavelengths.

## Key Features

### MUX / DEMUX Features

- Passive CWDM optical MUX and DEMUX modules contain no active components and offer very high reliability
- Optical output connection: LC / UPC
- Supports single-mode fiber
- Expandable from 4 or 8 to 12 or 16 channel systems
- Latching rear module to prevent accidental removal
- Fits OG3-FR frame, passive modules do not require any power
- 5-year transferable warranty
- Power: 4.5 watts

## Ordering Information

### Multiplexing / De-Multiplexing

FCM-6844	4 CH Optical MUX w/ Expansion Port
FCD-6845	4 CH Optical DEMUX w/ Expansion Port
FCM-6846	8 CH Optical MUX
FCD-6847	8 CH Optical DEMUX
FCM-6848	8 CH Optical MUX w/ Expansion Port
FCD-6849	8 CH Optical DEMUX w/ Expansion Port