CTC union

FRM220-OAP10

Single Channel EDFA Preamp

The FRM220-OAP10 is a FRM220 chassis rack managed single channel optical amplifier preamp module that provides multi-function, low noise, Erbium-Doped Fiber Amplifier (EDFA) solutions for metro Dense Wavelength Division Multiplexing (DWDM) applications. The FRM220-OAP10 operates at the receiving end of an optical link. It features medium to low input power, medium output power, and medium gain and designed for optical amplification to compensate for losses in a De-multiplexer located near the optical receiver. The FRM220-OAP10 provides Automatic Gain Control (AGC) via rack management or RS-232 console interface. Its fast transient suppression feature allowing the output power to be kept at a constant level when there are fast changes in input power.

Features

- Automatic Gain Control (AGC)
- Advanced performance monitoring
  - Input and output power levels
- Up to 10 dBm output power

- Gain flattening filters (GFF) assure flat gain (<1dB variance) over the entire amplified C-band.
- LC/UPC connector
- Hot-swap support
- Single channel EDFA with FRM220 chassis rack management

Applications

- Metropolitan WAN network system
- C-Band DWDM network system
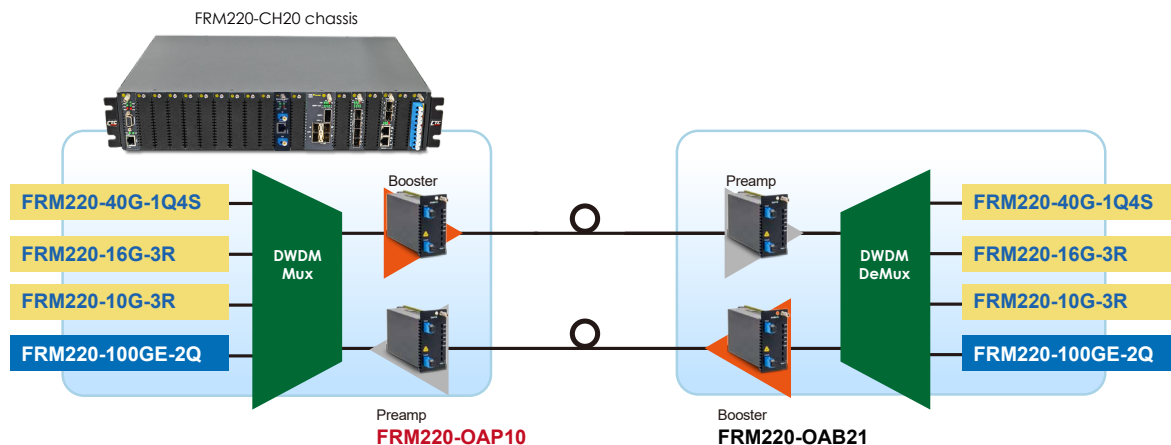
- CATV transmission system

Specifications

Operating wavelength	1528 ~ 1563nm	Return loss (Min.)	45dB
Input power	-30 ~ -10dBm	AGC gain (dB)	15 ~ 25dB
Signal gain	15 ~ 25dB	Connector	LC/UPC
Total saturated output power	+10dBm	Control mode	AGC
Gain flatness (Max.)	±0.75dB	Operation case temperature	0 ~ 65℃
Noise figure	6.0dB (Typ)	Relative humidity (noncondense)	5 ~ 85%
Polarization dependent gain (Max.)	0.5dB	Laser Class	Class 1M
Polarization mode dispersion (Max.)	0.5ps	Power consumption	8.5W
Output power stability (Max.)	±0.1dB	Dimension	159.5 × 42.1 × 88mm (D×W×H)

Application

EDFA booster/Preamp DWDM P to P application

Ordering Information

Model Name	Description
FRM220-OAP10	FRM220-OAP10 DWDM C-band EDFA preamp card with automatic gain control (AGC)

Chassis Option

Model Name	Description
FRM220-CH20(HS)	2U 19", 20 slots rack mount chassis with high speed cooling fan and rack mounting kit
FRM220-AC(HP)	Chassis power module 90 ~ 264 VAC, IEC connector, 300W
FRM220-DC48(HP)	Chassis power module 36 ~ 75 VDC, 3 pin terminal block, 300W
FRM220-CH02M-AC/DC/AD	2-slot chassis with console port and AC, DC or DC power, with fan
FRM220-CH04A-AC/DC/AD	4-slot chassis with built-in AC, DC or AD power