DanRiver TECHNOLOGIES

CTX Series

EDFA CTX6600-WV

Optical Fiber Amplifier for WDM

Main Features

- Protocol Transparent
- Gain Flattened for WDM
- Gain Variable
- Output Tilt Controlled
- C or L Band
- Variable Mid-stage Loss
- Supervisory Channel Add/Drop
- Input and Output Monitoring Taps
- Automatic Shutdown
- Transient Suppressed
- Plug and play system
- OEM modules

Description

CTX6600I-WV is a low cost, ultra-compact and flexible optical amplifier with or without mid-stage access, which integrates high power pump lasers, variable attenuators, provides the same reliable amplification as our previous products while adding unprecedented flexibility in gain control, tilt control and dispersion compensator control, allowing the same module to be used in different transmission systems.Intelligence and versatility are the main features of CTX6600I-WV. User can set different gain without suffering from gain tilt; can also automatically obtain best performance while combining CTX6600I-WV with DCM and Raman amplifiers.

Application Example: Most of applications for WDM is point-to-point amplification. Distance can go as much as 300 km without mid-span repeater. Below diagram shows how optical amplifier is used for DWDM transmission system and boosting transmission distance.



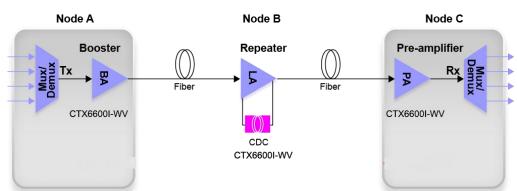
Figure 1: CTX6600I-WV

Benefits

- SFP VOA Optional
- Configurable as C or L band EDFA
- Built-in standard based network management, SNMPv.2 Agent, iCEO B/S Web GUI
- Input and Output Monitoring Tap
- Remote flash software update
- Low cost and ultra-compact 1U rack mount unit

Applications

- In-line or terminal high power amplification
- Broadband WDM amplification for C or L band
- DCM compensation through midstage access
- Optical Add/Drop node pre- and post-amplifier
- High power requirement up to 23



CTX6600I -WV application block diagram

Technical Specifications(System only)

| Common Features | |
|--|---|
| Wavelength Range | C band: 1528 to 1565 nm |
| | L band: 1570 nm to 1608 nm |
| Maximum Output Power | 20dBm min |
| Input range | $-29 \sim 7 \mathrm{dBm}$ |
| Variable Gain Range | 13 ~ 33dB |
| Flat Gain Range (to be specified) | $10 \sim 15 \text{dB}$ |
| Gain Flatness | $\pm 0.5 \sim \pm 1 dB$ or custom |
| Signal-spontaneous Noise Figure | $5 \sim 6 dB$ |
| Optical Return Loss (at All Ports) | 30 dB min. |
| Polarization Mode Dispersion | 0.3 ps typ. 0.5 ps max. |
| Polarization Dependent Gain | ± 0.2 dB typ. ± 0.5 dB max. |
| Signal Input & Output Detection Dynamic Range | $25 \min \sim 30 \text{dB}$ typ. |
| Signal Detection Accuracy (Within | $\pm 0.3 \text{ min} \sim \pm 1 \text{dB}$ typ. |
| the Range) | 71 |
| Available control | Constant Gain, Constant Power, Automatic Shutdown |
| Eye safety | Supported |
| Transient Over-shoot | $0.5 \text{ typ.} \sim 1.0 \text{ dB Max}$ |
| Transient Settling Time | 1.0ms |
| Management | |
| Remote Access | SNMP, iCEO B/S Web GUI |
| Local Craft | CLI via RS232 |
| Environmental | |
| Operating Temperature | -5 to 55 °C |
| Operating Humidity | 5 to 95% (non-condensing) |
| Storage Temperature | $-20 \text{ to} + 85 \degree$ C |
| Mechanics | |
| Rack Mount Unit | 19" 1U |
| Dimensions (H x W x D) | 44 x 437 x 440 mm |
| Power | |
| Power Supply | -48 VDC, or 100/240VAC |
| Power Consumption | <150W |
| OTES: | |

NOTES:

1) Customer specified output power shall be less or equal than above specification.

2) Optimum gain is where the user achieves the best gain flatness.

3) Transient performance is specified for 0.1 ms add/drop speed.

The specifications and information within this document are subject to change without further notice. All statements, information and recommendations are believed to be accurate but are presented without warranty of any kind. Contact Danriver for more details. www.danriver.com.cn

