EDFA CTX6600I-W

Optical Fiber Amplifier for WDM

Main Features

- Protocol Transparent
- Optical amplifier for WDM networks
- Gain flattened providing equal amplification to all channels
- Intelligent control for minimum impact when adding/dropping wavelengths
- Built-in supervisory channel add/drop filter optional
- Fast transient control
- Plug and play system or OEM modules

Description

CTX6600I-W is a low cost, ultra-compact and flexible optical amplifier with or without mid-stage access. It is based on mature technology. Depending on customer requirement, it can be configured as a C- or Lband EDFA, with fixed or variable gain.

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-W

Benefits

- SFP VOA Optional
- Configurable as C or L band EDFA
- Built-in standard based network management, SNMPv2 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

- Optical amplifier for DWDM wavelength transmission to achieve greater distances
- Upgrading the optical link budget to support 10G/40G/100G/200G etc. services
- Solving high loss or Long span in fiber infrastructure
- Reducing the number of regenerators







CTX6600I -W application block diagram

Technical Specifications(System only)

Common Features			
Wavelength Range	C band: 1528 to 1565 nm		
Gain Flatness Input/Output Detection range Optical Return Loss Polarization Mode Dispersion Polarization Dependent Gain Operation mode Eye safety	L band: 1570 nm to 1608 nm +/- 1dB or custom 25 dB min. 35 dB max 30 dB min. 0.3 ps typ. 0.5 ps max. 0.2 dB typ. 0.5 dB max. AGC, APC, ACC Supported		
Management			
Remote Access	SNMP, iCEO B/S Web GUI		
Local Craft	CLI via RS232		
Environmental			
Operating Temperature	-5 to 55 ℃		
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 x440 mm		
Power			
Power Supply	-48 VDC, or 100/240VAC		
Power Consumption	<150W		
Application Specific	Booster	Inline	Pre-amplifier
Minimum Input (dBm)	-20	-30	-40
Maximum Input (dBm)	Maximum Output - Specified Gain		
Minimum Output (dBm)	Minimum Input +Specified Gain		
Maximum Output (dBm)	<=23	<=20	<=13
Gain (Typical, dB, see note)	5~15	$10 \sim 25$	15~35
Noise Figure (typical, dB)	6	5	4.5
Mid-stage Loss (optical)	From 3 to 12 db customizable		
Transient Over-shoot	+/-dB typical		
Settable gain Range (dB) Noise	Specified maximum gain to 20dB below maximum varation dependant		
Figure Change			

NOTES:

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

4) Noise Figure is gain dependant. When user sets a lower gain compared to the optimum gain value, the noise figure will be worse.

