

## EDFA Optribution® Amplifier Chassis



The final product may vary from the above image depending on the options selected.

### Products:

<b>DEV 7161/Boost</b>	EDFA Boost Amplifier; 1529...1565 nm; SC/APC
<b>DEV 7161/Pre</b>	EDFA Pre Amplifier; 1529...1565 nm; SC/APC
<b>DEV 7162</b>	1:8 EDFA Distribution Boost Amplifier; 1529...1565 nm; SC/APC
<b>DEV 7163</b>	2*1:8 EDFA Distribution Boost Amplifier; 1529...1565 nm; SC/APC
<b>DEV 7165</b>	1:16 EDFA Distribution Boost Amplifier; 1529...1565 nm; SC/APC

### Features:

- ▀ 1 RU Chassis with single (or dual) EDFA Pre- or Boost-Amplifier(s)  
1, 8, or 16 Outputs
- ▀ High Gain and low Noise Figure EDFA Amplifiers
- ▀ Automatic Output Power Control (APC) Operation Mode
- ▀ Manual Gain Control (MGC) Operation Modes
- ▀ Monitoring of Input and Output Optical Power Level
- ▀ Front Panel Status and Alarm LEDs
- ▀ SNMP Support
- ▀ DEV Web Interface
- ▀ Data Backup Feature
- ▀ Power Supply Redundancy

## Technical Data

### **DEV 7161/Boost EDFA Boost Amplifier; 1529...1565 nm; SC/APC**

#### **Optical Specifications**

Number of Optical Inputs	1
Number of Optical Outputs	1
Operation Modes	Automatic Output Power Control (APC), Manual Gain Control (MGC)
Input Power Range	-10...+10 dBm
Max. Gain	Nominal 20 dB, max. 25 dB
Adjustable Gain	0...20 dB, Step Size 1 dB (MGC Mode)
Adjustable Output Power	0...20 dBm, Step Size 1 dB (APC Mode)
Saturated Output Power	+20 dBm, Input Power $\geq$ -5 dBm
Return Loss	>35 dB

### **DEV 7161/Pre EDFA Pre Amplifier; 1529...1565 nm; SC/APC**

#### **Optical Specifications**

Number of Optical Inputs	1
Number of Optical Outputs	1
Operation Modes	Automatic Output Power Control (APC)
Input Power Range	-25...-5 dBm
Max. Gain	25 dB, typ. 27 dB (averaged)
Adjustable Output Power	0...10 dBm, Step Size 1 dB
Saturated Output Power	+10 dBm, Input Power $\geq$ -15 dBm
Return Loss	>45 dB

### **DEV 7162 1:8 EDFA Distribution Boost Amplifier; 1529...1565 nm; SC/APC**

#### **Optical Specifications**

Number of Optical Inputs	1
Number of Optical Outputs	8
Operation Modes	Automatic Output Power Control (APC), Manual Gain Control (MGC)
Input Power Range	-10...+10 dBm
Max. Gain	Nominal 20 dB, max. 25 dB
Adjustable Gain	-11...9 dB, Step Size 1 dB (MGC Mode)
Adjustable Output Power	-11...9 dBm, Step Size 1 dB (APC Mode)
Saturated Output Power	+20 dBm (@ Internal Amplifier Output), Input Power $\geq$ -5 dBm
Input Return Loss	>35 dB
Output Return Loss	>50 dB

### **DEV 7163 2\*1:8 EDFA Distribution Boost Amplifier; 1529...1565 nm; SC/APC**

#### **Optical Specifications**

Number of Optical Inputs	2
Number of Optical Outputs	2 * 8
Operation Modes	Automatic Output Power Control (APC), Manual Gain Control (MGC)
Input Power Range	-10...+10 dBm
Max. Gain	Nominal 20 dB, max. 25 dB
Adjustable Gain	-11...9 dB, Step Size 1 dB (MGC Mode)
Adjustable Output Power	-11...9 dBm, Step Size 1 dB (APC Mode)
Saturated Output Power	+20 dBm (@ Internal Amplifier Output), Input Power $\geq$ -5 dBm
Input Return Loss	>35 dB
Output Return Loss	>50 dB

**Technical Data (cont.)**

**DEV 7165 1:16 EDFA Distribution Boost Amplifier; 1529...1565 nm; SC/APC**

**Optical Specifications**

Number of Optical Inputs	1
Number of Optical Outputs	16
Operation Modes	Automatic Output Power Control (APC), Manual Gain Control (MGC)
Input Power Range	-10...+10 dBm
Max. Gain	Nominal 20 dB, max. 25 dB
Adjustable Gain	-14...6 dB, Step Size 1 dB (MGC Mode)
Adjustable Output Power	-14...6 dBm, Step Size 1 dB (APC Mode)
Saturated Output Power	+20 dBm (@ Internal Amplifier Output), Input Power $\geq$ -5 dBm
Input Return Loss	>35 dB
Output Return Loss	>50 dB

**Common Specifications**

**DEV 7161/Boost, DEV 7161/Pre, DEV 7162, DEV 7163, DEV 7165**

**Common Optical Specifications**

Connector Type & Options	Standard: SC/APC, Option 07: FC/APC, Option 08: E2000 HRL
Laser Class (according to IEC 60 825-1)	Class 1M (low Risk to Eyes, no Risk to Skin)
Fiber Type	Single Mode 9/125 $\mu$ m
Wavelength	1529...1565 nm
Noise Figure	<5.5 dB, typ. 5 dB

**Remote Communication**

Interface (Connector)	• Ethernet (RJ-45)
Remote Control & Surveillance (Interface)	• via Web Interface (Ethernet); • via SNMP (Ethernet).

**Redundant Power Supply**

Supply Voltage	100...240 V AC supplied by two different Lines
Power Consumption	<80 VA

**General Specifications**

Size	19" (483 mm) Width, 1 RU (44 mm) Height, ~260 mm Depth + max. 80 mm (Optical Connectors)
Weight	~9 kg
Environmental Conditions	ETS 300019 Part 1-3 Class 3.1



## Order Information

### Products

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### Optical Connector Options

Option 07	FC/APC Optical Connector
Option 08	E2000/HRL Optical Connector

## Contact

DEV Systemtechnik GmbH & Co. KG  
Grüner Weg 4A  
61169 Friedberg  
GERMANY  
Phone: +49 6031 6975 100  
Fax: +49 6031 6975 114  
info@dev-systemtechnik.com  
www.dev-systemtechnik.com

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