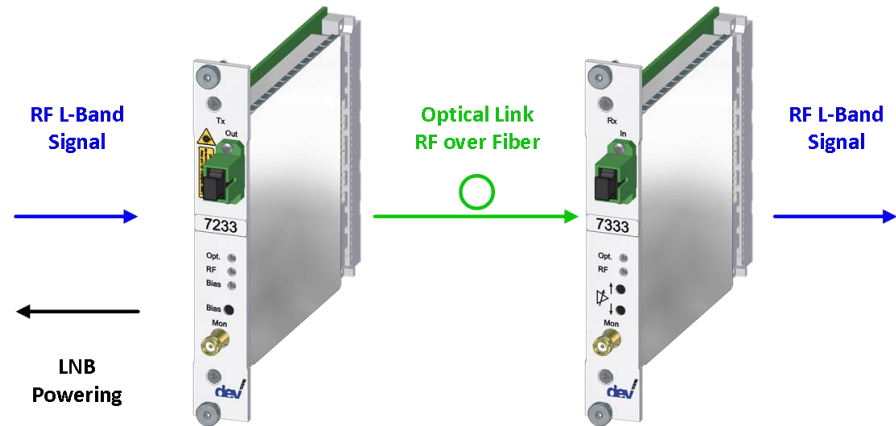


## Optribution Top L-Band Link DEV 7233 & DEV 7333



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

### Products:

- DEV 7233** Top Performance Optribution Transmitter; 850...2450 MHz; SC/APC; with adjustable Gain and Automatic OMI Optimization
- DEV 7333** Top Performance Optribution Receiver; 850...2450 MHz; SC/APC; with adjustable Gain and Slope

### Features:

- ▀ Recommended for RF-over-Fiber Links with optical Losses up to 20 dB
- ▀ Adjustable Rx and Tx Gain
- ▀ Continuous Optical Modulation Index Optimization
- ▀ RF Sensing with Status LED
- ▀ LNB Powering, switchable 13/18 V and 22 kHz Tone
- ▀ Push Buttons for Gain Control and LNB Power
- ▀ RF Monitor Ports
- ▀ 16 CWDM Wavelengths
- ▀ Optical Connector Type SC/APC (optional FC/APC or E2000 HRL)

### Link Specifications DEV 7233 & DEV 7333

	Value	Condition
Frequency Range	850...2450 MHz	
Max. Link Gain	35±2 dB	
Adjustable Gain (Tx Module)	-20...20 dB ±0.5 dB in 1 dB Steps	
Adjustable Gain (Rx Module)	0...15 dB ±0.5 dB in 1 dB Steps	
Adjustable Slope (Rx Module)	0...4 dB in 1 dB Steps	
Flatness	±1.0 dB ±0.15 dB	850...2450 MHz In any 36 MHz window
Return Loss	>14 dB, typ. 16 dB	
Gain Stability	±2 dB	0...+50 °C / 32...122 °F
Group Delay	<2 ns	Note 2
Nominal RF Input Level	-20 dBm	Aggregated power
Noise Figure	<31 dB <16 dB	Tx Module Gain 0 dB Tx Module Gain 18 dB
SFDR <sub>2/3</sub>	108 dB/Hz <sup>2/3</sup>	
CNR	50 dB	Notes 1, 2
Output IP3	>21 dBm >26 dBm	Rx Module Gain 0 dB Rx Module Gain 15 dB
OP1dB	>7 dBm >18 dBm	Rx Module Gain 0 dB Rx Module Gain 15 dB
Input Power dynamic Range	-70...+10 dBm	Aggregated power
Dynamic Power Range		
Automatic OMI Optimization	-20...+10 dBm	Aggregated power
Damage RF Input Level	15 dBm	Aggregated power
Optical Budget	20 dB	Notes 1, 3

Note 1:  $P_{in}$  = -20 dBm aggregated power

Note 2: 36 MHz window

Note 3: CNR 15 dB minimum

### Technical Data DEV 7233 & DEV 7333

	Value	Condition
<b>Common Optical Specifications</b>		
Fiber Type	Single Mode 9/125 $\mu$ m	
Optical Connector	SC/APC, E2000/HRL, or FC/APC	Standard is SC/APC
<b>Tx Specifications (DEV 7233)</b>		
Laser Type	DFB	
Laser Class (according to IEC 60 825-1)	Class 1M (low Risk to Eyes, no Risk to Skin)	
Optical Power Output	3.5 mW / 5.4 dBm	
Available CWDM Wavelengths	(16 different Wavelengths)	Note 1
Power Consumption	12 V; 200 mA	Without LNB power
Weight	~0.5 kg	
<b>Tx LNB Power &amp; Current Monitoring</b>		
LNB Power	Max. 350 mA	
Voltage and Tone Control	13 V, 18 V and 0 Hz, 22 kHz	
Alarm Indication	Via LED on the Front Panel & via Remote Communication	
<b>Rx Specifications (DEV 7333)</b>		
Wavelength Range	1100...1650 nm	
Min. optical Input Level (optical Sensitivity)	>-15 dBm	
Damage optical Input Level	+10 dBm	
Power Consumption	12 V; 250 mA	
Weight	~0.3 kg	
<b>Tx &amp; Rx Monitor Port</b>		
Impedance, Connector	50 Ohm, SMA (f)	
Return Loss	>18 dB typ.	
Insertion Loss / Flatness Monitor Port	= Input Level – 26 dB $\pm$ 2 dB (Tx) = Output Level – 26 dB $\pm$ 2 dB (Rx)	
<b>Tx &amp; Rx RF Sensing</b>		
Adjustable Threshold Level (THL)	0 dBm > THL > -50 dBm	
Threshold Level Accuracy	$\pm$ 3 dB	
Threshold Repeatability	<0.1 dB	
Alarm Indication	Via LED on the Front Panel & via Remote Communication	
<b>Tx &amp; Rx General Specification</b>		
Size	4 HP (20 mm) Width, 3 RU (133 mm) Height, 3.94" (100 mm) Depth	
Environmental Conditions	ETS 300019 Part 1-3 Class 3.1E	

Note 1: Please refer to the Order Information section for the available wavelength options.

## Order Information

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

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