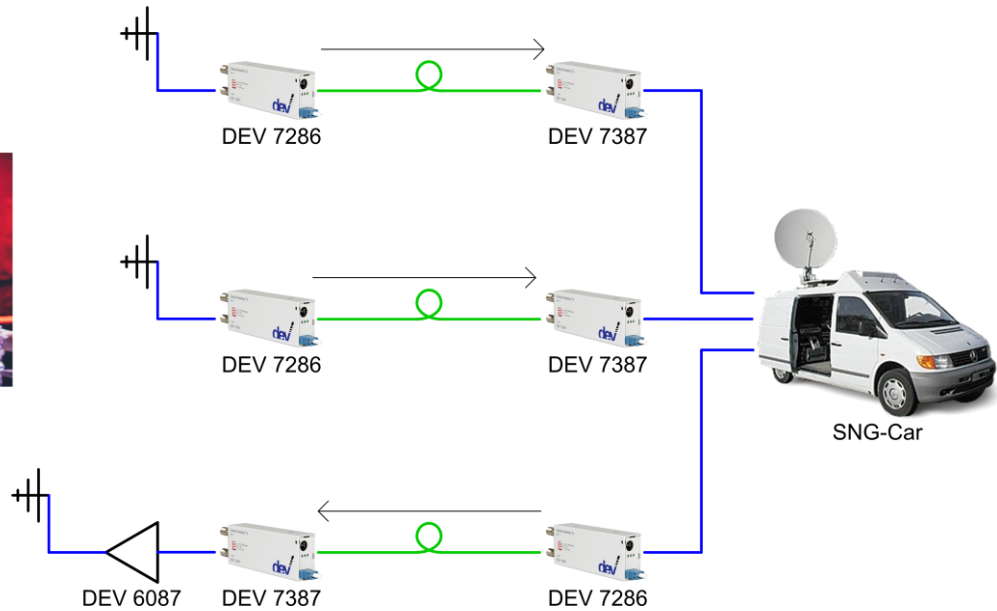


## Optical Transmission for wireless Microphone and Earphone Transmission Extension up to 1 km

THE ART OF ENGINEERING



### Products

- DEV 7286** Desktop CWDM Optribution Transmitter; 450...960 MHz; LC/APC
- DEV 7387** Desktop TV Optribution Receiver; 47...1006 MHz; LC/APC
- DEV 6087** Desktop Amplifier; 450...960 MHz

### Features

- ▀ Standalone Optical Transmitter (Tx) Module, Optical Receiver (Rx) Module, and Amplifier Module
- ▀ RF Monitoring Port
- ▀ High Input Power Level Option (DEV 7286)
- ▀ 75 Ohm, precision F (f), and 50 Ohm, BNC (f) Ports available
- ▀ Overtemperature Protection
- ▀ Different Mounting Products are available



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

### Link Specifications DEV 7286 & DEV 7387

	Value	Condition
Frequency Range	450...960 MHz	
Link Gain	11±3 dB -33±3 dB	Standard, @ +25 °C (77 °F) Option HIL, @ +25 °C (77 °F)
Flatness	±0.7 dB ±0.2 dB	450...960 MHz In any 8 MHz window
Return Loss	>16 dB, typ. 20 dB	
Nominal RF Input Level	-20 dBm +17 dBm	Standard, aggregated power Option HIL, aggregated power
Noise Figure	<25 dB <70 dB	Standard Option HIL
Noise Floor	<-140 dBm/Hz	
SFDR2/3	110 dB/Hz <sup>2/3</sup> 80 dB/Hz <sup>2/3</sup>	Standard Option HIL
CNR	58 dB 52 dB	Standard, Notes 1, 2, 3 Option HIL, Notes 1, 2, 3
Output IP3	16 dBm	
OP1dB	+3 dBm ±1 dB	
Intermodulation Distortion	>52 dBc >68 dBc	Standard, @ 2 tones, -20 dBm each Standard, @ 2 tones, +14 dBm each
Input Power dynamic Range	-90...-20 dBm -50...+17 dBm	Standard, aggregated power, Note 4 Option HIL, aggregated power, Note 4
Damage RF Input Level	+15 dBm +27 dBm	Standard, aggregated power Option HIL, aggregated power
Optical Power Output	1.6 mW / 2 dBm	
Optical Distance	≤1 km	Notes 1, 2

Note 1: P<sub>in</sub> = -20 dBm (Standard), P<sub>in</sub> = +17 dBm (Option HIL)

Note 2: 8 MHz window

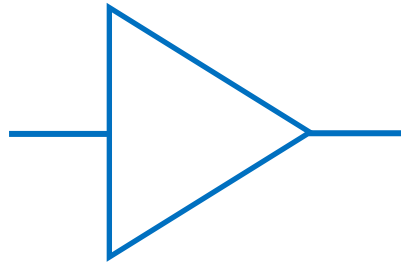
Note 3: with back-to-back fiber connection (1 m)

Note 4: minimum 10 dB CNR margin for single audio carrier

**DEV 7286 & DEV 7387 Desktop CWDM Optribution Modules**

Technical Data	Value	Condition
<b>Common Optical Specifications</b>		
Fiber Type	Single Mode 9/125 $\mu$ m	
Optical Connector	LC/APC or LC/PC	Standard is LC/APC
<b>Tx Specifications (DEV 7286)</b>		
Laser Type	DFB	
Laser Class (according to IEC 60 825-1)	Class 1M (low Risk to Eyes, no Risk to Skin)	
Available CWDM Wavelengths	(9 different Wavelengths)	Note 1
Impedance, Connectors	75 Ohm , precision F (f) or 50 Ohm, BNC (f)	Standard is 75 Ohm, precision F (f)
Insertion Loss Monitor Port	= Input Level +12 $\pm$ 3 dB	
Power Consumption Module	12 V; 250 mA	
<b>Rx Specifications (DEV 7387)</b>		
Wavelength Range	1260...1620 nm	
Impedance, Connectors	75 Ohm, precision F (f) or 50 Ohm, BNC (f)	Standard is 75 Ohm, precision F (f)
Insertion Loss / Flatness Monitor Port	Output Level $\pm$ 3 dB	
Power Consumption Module	12 V; 300 mA	
<b>Tx &amp; Rx Optical Monitor</b>		
Optical Status Indication	Via LED at the Front Panel	
<b>Tx &amp; Rx External Power Supply</b>		
Primary Voltage	100...240 V AC	
Power Consumption Power Supply	typ. <20 VA	
<b>Tx &amp; Rx General Specifications</b>		
Size	5.43" (138 mm) Length, 1.65" (42 mm) Width, 0.9" (23 mm) Height	
Weight	~0.1 kg	
Operating Temperature	-20...+65 $^{\circ}$ C (-4...+150 $^{\circ}$ F) with Overtemperature Protection	
Environmental Conditions	ETSI EN 300 019 Part 1-3 Class 3.1E	Except Temperature

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



## DEV 6087 Desktop Amplifier Module

Technical Data	Value	Condition
<b>Rx Specifications</b>		
Frequency Range	450...960 MHz	
Impedance, Connectors	50 Ohm, BNC (f)	
Gain	33±2 dB	
Gain Stability vs. Temperature	<0,4 dB per 10 °C change	-20...+65 °C (-4...+150 °F)
Flatness	±2 dB	
Input Level	<-15 dB	
Nominal Output Level	>+17 dBm	
OP1dB	>+24 dBm	
IM3	>40 dBc	@ 2 tones, -21 dBm each
Return Loss	min. 12 dB, typ. 15 dB	
<b>External Power Supply</b>		
Primary Voltage	100...240 V AC	
Power Consumption	<3 VA	
<b>General Specifications</b>		
Size	5.43" (138 mm) Length, 1.65" (42 mm) Width, 0.9" (23 mm) Height	
Weight	~0.1 kg	
Operating Temperature	-20...+65 °C (-4...+150 °F)	
Environmental Conditions	ETSI EN 300 019 Part 1-3 Class 3.1E	Except Temperature

## Order Information

### Product and Options

A Desktop Optribution module is delivered in a handy storage case, holding the module and an external plug-in power supply with different interchangeable AC plugs.

DEV 7286 Desktop CWDM Optribution Transmitter; 450...960 MHz; LC/APC

#### Wavelength Options:

<u>Option</u>	<u>Wavelength</u>	<u>Option</u>	<u>Wavelength</u>
Lambda 0	1310 nm	Lambda 5	1550 nm
Lambda 1	1470 nm	Lambda 6	1570 nm
Lambda 2	1490 nm	Lambda 7	1590 nm
Lambda 3	1510 nm	Lambda 8	1610 nm
Lambda 4	1530 nm		

Option 01 50 Ohm, BNC (f) instead of 75 Ohm, F (f) Connectors

Option 10 Change LC/APC to LC/PC Connector

Option HIL High Input Level (+17 dBm)

DEV 7387 Desktop TV Optribution Receiver; 47...1006 MHz; LC/APC

Option 01 50 Ohm, BNC (f) instead of 75 Ohm, F (f) Connectors

Option 10 Change LC/APC to LC/PC Connector

The Desktop Amplifier module is delivered in a handy storage case, holding the module and an external plug-in power supply with different interchangeable AC plugs.

DEV 6087 Desktop Amplifier; 450...960 MHz

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