

## Desktop Optribution Modules and Mounting Products



(Original Size)

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

THE ART OF ENGINEERING

### Products

<b>DEV 7285</b>	Desktop Optribution Transmitter; 700...2600 MHz; LC/APC
<b>DEV 7287</b>	Desktop TV Optribution Transmitter; 47...1006 MHz; LC/APC
<b>DEV 7385</b>	Desktop Optribution Receiver; 700...2600 MHz; LC/APC
<b>DEV 7387</b>	Desktop TV Optribution Receiver; 47...1006 MHz; LC/APC
<b>DEV 7151</b>	Wall Mount Chassis for Desktop Optribution Modules; 4 Slots
<b>DEV 68-0004</b>	DIN Rail Bracket for two Desktop Optribution Modules

### Features

- ▀ Standalone Optical Transmitter (Tx) Modules and Optical Receiver (Rx) Modules
- ▀ RF Monitoring Port
- ▀ LNB Powering, switchable 13/18 V and 0/22 kHz Tone (DEV 7285)
- ▀ Outdoor Enclosure
- ▀ Wide Temperature Range
- ▀ Overtemperature Protection

### Link Specifications DEV 7285 & DEV 7385

	Value	Condition
Frequency Range	700...2600 MHz	
Link Gain	0±3 dB -2±3 dB	700...2300 MHz 2300...2600 MHz @ +25 °C (77 °F)
Flatness	±2.5 dB ±1.5 dB ±0.3 dB	700...2300 MHz 950...2150 MHz In any 36 MHz window @ 950...2150 MHz
Return Loss in and out	>14 dB, typ. 16 dB >12 dB	700...2300 MHz 2300...2600 MHz
Nominal RF Input Level	-10 dBm	Total power
Noise Figure	<31 dB	
SFDR2/3	102 dB/Hz <sup>2/3</sup>	Note 1
CNR	55 dB	Notes 1, 2, 3
Output IP3	15 dBm	
OP1dB	+2 dBm	
Intermodulation Distortion	>50 dBc	@ 2 tones, -13 dBm each
Input Power dynamic Range	-65...-6 dBm	Total power
Damage RF Input Level	15 dBm	Total power
Optical Power Output	1.25 mW / 1 dBm	
Optical Budget	≤6 dB	Notes 1

Note 1: P<sub>in</sub> = -30 dBm

Note 2: 36 MHz window

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

### Link Specifications DEV 7287 & DEV 7387

	Value	Condition
Frequency Range	47...1006 MHz	
Link Gain	11±3 dB	@ +25 °C (77 °F)
Flatness	±0.7 dB ±0.2 dB	47...1006 MHz In any 8 MHz window
Return Loss	>16 dB, typ. 20 dB	
Nominal RF Input Level	-20 dBm	Total power
Noise Figure	<25 dB	
Noise Floor	<-120 dBm/Hz	
SFDR2/3	102 dB/Hz <sup>2/3</sup>	Note 1
CNR	55 dB	Notes 1, 2, 3
Output IP3	16 dBm	
OP1dB	+3 dBm ±1 dB	
Intermodulation Distortion	>60 dBc	@ 2 tones, -20 dBm each, Note 4
Input Power dynamic Range	-58...-20 dBm	Total power, Notes 2, 5
Damage RF Input Level	15 dBm	Total power
Optical Power Output	1.6 mW / 2 dBm	
Optical Budget	≤20 dB	Notes 1

Note 1: P<sub>in</sub> = -20 dBm

Note 2: 8 MHz window

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

Note 4: with 3 dB optical loss

Note 5: minimum 10 dB CNR margin for 42 carrier

**DEV 728x & DEV 738x Desktop Optribution Modules**

Technical Data	Value	Condition
<b>Common Optical Specifications</b>		
Fiber Type	Single Mode 9/125 $\mu\text{m}$	
Optical Connector	LC/APC or LC/PC	Standard is LC/APC
<b>Tx Specifications (DEV 728x)</b>		
Laser Class (according to IEC 60 825-1)	Class 1M (low Risk to Eyes, no Risk to Skin)	
Wavelength	1310 nm	
Impedance, Connectors	75 Ohm, precision F (f)	
Insertion Loss Monitor Port	DEV 7285: = Input Level $+1\pm 3$ dB DEV 7287: = Input Level $+12\pm 3$ dB	
Power Consumption Module	12 V; 250 mA	Without LNB power (DEV 7285)
<b>Tx LNB Power (DEV 7285)</b>		
Voltage and Tone Control	13 V, 18 V and 0 Hz, 22 kHz	
LNB Power	max. 450 mA	
LNB Power on Indication	Via LED at the Front Panel	
<b>Rx Specifications (DEV 738x)</b>		
Wavelength Range	1260...1620 nm	
Impedance, Connectors	75 Ohm, precision F (f)	
Insertion Loss 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 $^{\circ}\text{C}$ (-4...+150 $^{\circ}\text{F}$ ) with Overtemperature Protection	
Environmental Conditions	ETS 300019 Part 1-3 Class 3.1E	Except Temperature



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

### DEV 7151 Wall Mount Chassis for Desktop Optribution Modules

Technical Data	Value	Condition
<b>Capacity</b>		
Number of Modules	4 (max.)	
<b>Power Supply</b>		
Primary Voltage	100...240 V AC supplied by a single Line	
Number of Power Supplies	1 or 2	Standard is 1 power supply
Power Consumption	<60 VA (1 Power Supply) or <120 VA (2 Power Supplies)	
<b>General Specifications</b>		
Module Fixture	DIN Rail Brackets included for 4 Desktop Optribution Modules	
Cable Glands	for 4 RF Lines and for 1 Optical Line, external Ø 0.2...0.41" (5...10.5 mm)	
Size	12.8" (324 mm) Width, 11.4" (289 mm) Height, 5.7" (145 mm) Depth	
Weight	~5 kg (empty Chassis)	
Operating Temperature	-20...+65 °C (-4...+150 °F) (avoid direct Exposure to Sunlight)	
Ingress Protection Rating	IP54	
Environmental Conditions	ETS 300019 Part 1-3 Class 3.1E	Except Temperature and Ingress Protection Rating

### DEV 68-0004 DIN Rail Bracket for two Desktop Optribution Modules

Technical Data	Value	Condition
Number of Modules	2 (max.)	
DIN Rail Type	DIN-EN 60715 TH35	
Size	1.97" (50 mm) Width,	
Weight	~0.2 kg	

## Order Information

### Desktop Optribution Modules

A Desktop Optribution module is delivered in a handy case, holding the module and a wall mount power supply with different interchangeable AC plugs.

DEV 7285	Desktop Optribution Transmitter; 700...2600 MHz; LC/APC
DEV 7287	Desktop TV Optribution Transmitter; 47...1006 MHz; LC/APC
DEV 7385	Desktop Optribution Receiver; 700...2600 MHz; LC/APC
DEV 7387	Desktop TV Optribution Receiver; 47...1006 MHz; LC/APC

Optical Connector Option for all Desktop Optribution modules:

Option 10	Change LC/APC to LC/PC Connector
-----------	----------------------------------

### Mounting Products for Desktop Optribution Modules

If the DEV 7151 is ordered in combination with 1...4 Desktop Optribution Modules, it is delivered preinstalled, completely wired, and ready for outdoor use.

DEV 7151	Wall Mount Chassis for Desktop Optribution Modules; 4 Slots
Option 16	Redundant Power Supply
DEV 68-0004	DIN Rail Bracket for two Desktop Optribution Modules

## Contact

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

Rev. 13-Jul-2022

### Disclaimer

The information contained herein is believed to be reliable. DEV Systemtechnik makes no warranties regarding the information contained herein. DEV Systemtechnik assumes no responsibility or liability whatsoever for any of the information and for the use of the information contained herein. The information contained herein is provided "AS IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders.