

Standalone Desktop Optribution® Modules



(Original Size)

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

Products:

DEV 7285	Desktop Optribution® Transmitter; 700...2300 MHz
DEV 7287	Desktop TV Optribution® Transmitter; 47...1006 MHz
DEV 7385	Desktop Optribution® Receiver; 700...2300 MHz
DEV 7387	Desktop TV Optribution® Receiver; 47...1006 MHz
DEV 7151	Wall Mount Chassis for Optribution® Desktop Modules; 4 Slots
DEV 68-0004	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 22 kHz Tone (DEV 7285)
- ▀ Overtemperature Protection
- ▀ Different Mounting Products

Technical Data

Common Specifications Desktop Optribution® Modules

Laser & Optical Connector

Laser Type	DEV 7285: FP DEV 7287: DFB
Laser Class (according to IEC 60 825-1)	Class 1M (low Risk to Eyes, no Risk to Skin)
Fiber Type	Single Mode 9/125 μ m
Connector Type & Options	Standard: LC/APC, Option 10: LC/PC
Wavelength Rx Modules	1260...1620 nm
Wavelength Tx Modules	1310 nm

Monitoring Port

Frequency Response	DEV 7285: = Input Level +1 \pm 3 dB DEV 7287: = Input Level +12 \pm 3 dB DEV 7385, DEV 7387: = Output Level \pm 3 dB
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LNB Power (DEV 7285)

LNB Power	13 V, 18 V, Off and 0 Hz, 22 kHz; max. 450 mA
LNB Power on Indication	Via LED on the Front Panel

Optical Monitor

Optical Status Indication	Via LED on the Front Panel
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External Power Supply

Primary Voltage	100...240 V AC
Power Consumption	typ. <20 VA

General Specifications

Power Consumption Modules	DEV 7285 (without LNB Power), DEV 7287: 12 V; 250 mA DEV 7385, DEV 7387: 12 V; 300 mA
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) with Overtemperature Protection
Environmental Conditions	ETS 300019 Part 1-3 Class 3.1

Link Specifications DEV 7285 & DEV 7385

RF Specifications

Frequency Range	700...2300 MHz	
Link Gain	0 \pm 3 dB	(@ +25 °C / 77 °F)
Amplitude Frequency Response	\pm 2.0 dB	(700...2300 MHz)
	\pm 1.5 dB	(950...2150 MHz)
	\pm 0.3 dB	(in any 36 MHz Window @ 950...2150 MHz)
Return Loss	>14 dB, typ. 16 dB	
Nominal RF Input Level	-10 dBm	(total Power)
Noise Figure	<31 dB	
SFDR ^{2/3} ₁	102 dBc	
CNR ^{2 3 4}	55 dB	
Output IP3	15 dBm	
OP1dB	+2 dBm	
Intermodulation Distortion	>50 dBc	(@ 2 Tones, -13 dBm each)
Input dynamic Range ^{3 5}	-45...-6 dBm	(total Power)
Damage RF Input Level	15 dBm	(total Power)
Optical Power Output	1.25 mW / 1 dBm	
Optical Budget ^{2 3 5}	\leq 6 dB	

¹ P_{in} = -13 dBm, IM3 = 50 dBc

² P_{in} = -13 dBm

³ 36 MHz Window

⁴ with back to back Fiber Connection (1 m)

⁵ minimum 10 dB CNR Margin

Technical Data (cont.)

Link Specifications DEV 7287 & DEV 7387

RF Specifications

Frequency Range	47...1006 MHz	
Link Gain	11±3 dB	(@ +25 °C / 77 °F)
Amplitude Frequency Response	±0.7 dB	(47...1006 MHz)
Return Loss	>16 dB, typ. 20 dB	(in any 8 MHz Window)
Nominal RF Input Level	-20 dBm	(total Power)
Noise Figure	<25 dB	
SFDR _{2/3} ¹	102 dBc	
CNR ^{2 3 4}	55 dB	
Output IP3	16 dBm	
OP1dB	+3 dBm	
Intermodulation Distortion ⁵	>60 dBc	(@ 2 Tones, -20 dBm each)
Input dynamic Range ^{3 6}	-58...-20 dBm	(total Power)
Damage RF Input Level	15 dBm	(total Power)
Optical Power Output	1.6 mW / 2 dBm	
Optical Budget ^{2 3 6}	≤20 dB	

¹ P_{in} = -20 dBm, IM3 = 60 dBc

² P_{in} = -20 dBm

³ 8 MHz Window

⁴ with back to back Fiber Connection (1 m)

⁵ with 3 dB Optical Loss

⁶ minimum 10 dB CNR Margin

DEV 7151 Wall Mount Chassis for Optribution® Desktop Modules; 4 Slots Capacity

Number of Modules	4 (max.)
Power Supply	
Primary Voltage	100...240 V AC
Power Consumption	<60 VA
General Specifications	
Size	12.8" (324 mm) Width, 11.4" (289 mm) Height, 5.7" (145 mm) Depth
Cable Glands	for 4 RF Lines and for 1 Optical Line, external Diameter 0.2...0.41" (5...10.5 mm)
Weight	~5 kg (empty Chassis)
Operating Temperature	-20...+65 °C (-4...+149 °F) (avoid direct Exposure to Sunlight)
Ingress Protection Rating	IP54

Option 16: Redundant Power Supply

By default the DEV 7151 has a single power supply installed, with Option 16 the wall mount chassis provides redundant power supplies.

Primary Voltage	100...240 V AC supplied by a single Line
Power Consumption	<120 VA

Technical Data (cont.)

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

The DEV 68-0004 is a bracket for a DIN rail (type DIN-EN 60715 TH35) which can be used for the assembly of Desktop Optribution® modules.

Capacity

Number of modules 2 (max.)

General Specifications

Size 1.97" (50 mm) Width, 5.71" (145 mm) Height,
0.45" (11.5 mm) Depth (without DIN Rail)

Weight ~0.2 kg

Environmental Conditions ETS 300019 Part 1-3 Class 3.1

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.

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DEV 7287 Desktop TV Optribution® Transmitter; 47...1006 MHz

DEV 7385 Desktop Optribution® Receiver; 700...2300 MHz

DEV 7387 Desktop TV Optribution® Receiver; 47...1006 MHz

Optical Connector Option for all Desktop Optribution® modules:

Option 10 Change LC/APC to LC/PC Connector

Mounting Products for Desktop Optribution® Modules

DEV 7151 Wall Mount Chassis for Optribution® Desktop Modules; 4 Slots

Option 16 Redundant Power Supply

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

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Technical specifications are subject to change