

Optribution® Desktop Modules L-Band



Products:

DEV 7285	Desktop Optribution® Transmitter; 700...2300 MHz
DEV 7385	Desktop Optribution® Receiver; 700...2300 MHz

Features:

- Optical Transmitter (Tx) Modules and Optical Receiver (Rx) Modules for extended L-Band Applications
- RF Monitoring Port for selected Optical Modules
- LNB Bias Supply 13/18 V for Optical Transmitter Modules
- 0/22 kHz Switchable
- Standalone Device

Technical Data

Common Specifications

Laser & Optical Connector

Laser type	FP
Laser class	
(according to IEC 60 825-1)	Class 1M (low risk to eyes, no risk to skin)
Fiber type	Single mode 9/125 μm
Connector type	LC/APC
Wavelength Rx modules	1260...1620 nm
Wavelength Tx modules	1310 nm

Bias (Tx modules, only)

Bias	13/18 V, 0/22 kHz; max. 450 mA
Bias on indication	Via LED on the front panel

Optical Monitor

Optical status indication	Via LED on the front panel
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General Specifications

Power consumption	DEV 7285: 12 V; 250 mA (without bias) DEV 7385: 12 V; 300 mA
Housing	Length 138 mm (5.43"), width 42 mm (1.65"), height 23 mm (0.9")
Weight	~0.1 kg
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	1 $\pm$ 3 dB	
Amplitude frequency response	$\pm$ 1.5 dB $\pm$ 1.0 dB $\pm$ 0.3 dB	(700...2300 MHz) (950...2150 MHz) (in any 36 MHz window)
Return loss	>14 dB, typ. 16 dB	
Gain stability	$\pm$ 2 dB	(0...+50 °C / 32...122 °F)
Group delay distortion	<2 ns	
Nominal RF input level	-10 dBm	(total power)
Noise figure	31 dB	
SFDR _{2/3} ¹	107 dBc	
CNR ^{2 3 4}	74 dB	
Output IP3	16 dBm	
OP1dB	-1 dBm	
Intermodulation distortion	>50 dBc	(@ 2 tones, -13 dBm each)
Input dynamic range ³	-45...-6 dBm	(total power)

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Technical Data (cont.)

Damage RF input level	12 dBm	(total power)
Damage optical input level	10 dBm	
Optical power output	2.5 mW / 4 dBm	
Maximum theoretical optical budget ^{2 3 5}	20 dB	

- ¹ $P_{in} = -15$ dBm, IM3 = 48 dBc
- ² $P_{in} = -15$ dBm
- ³ 36 MHz window
- ⁴ with back to back fiber connection (2 m)
- ⁵ minimum 10 dB CNR margin

All specifications are subject to change without notice.

Order Information

Desktop Optribution® Transmitter Modules L-Band

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Desktop Optribution® Receiver Modules L-Band

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Rev. 04-SEP-2012