

DEV 7244/7344

OPTRIBUTION L-BAND AND 10 MHZ LINK

- L-Band and 10 MHz Reference Signal over a single Fiber
- Recommended for RF-over-Fiber Links with optical Losses up to 10 dB
- Adjustable Gain for L-Band & 10 MHz Reference Signal
- RF Sensing with Status LED for L-Band & 10 MHz Reference Signal
- LNB Power with Current Monitoring and Status LED
- Optical Connector Type SC/APC (optional FC/APC or E2000 HRL)



LINK SPECIFICATIONS DEV 7244 & DEV 7344

RF SPECIFICATIONS REFERENCE	VALUE	CONDITION
Frequency Range	10 MHz	
Max. Link Gain	0±2 dB	
Adjustable Gain (Rx Module)	0...16 dB in 1 dB Steps	
Return Loss	>14 dB, typ. 18 dB	
Gain Stability	±2 dB	0...+50 °C / 32...122 °F
Group Delay Distortion	<2 ns	
Nominal RF Input Level	0 dBm	Total power
Noise Figure	20 dB	
OP1dB	13 dBm	
Damage RF Input Level	12 dBm	Total power

RF SPECIFICATIONS L-BAND		
Frequency Range	700...2300 MHz	
Max. Link Gain	0±2 dB	
Adjustable Gain (Rx Module)	0...16 dB in 1 dB Steps	
Flatness	±1.5 dB ±0.2 dB	700...2300 MHz In any 36 MHz window
Return Loss	>14 dB, typ. 18 dB	
Gain Stability	±2 dB	0...+50 °C / 32...122 °F
Group Delay Distortion	<2 ns	
Nominal RF Input Level	-10 dBm	Total power
Noise Figure	28 dB, typ. 23 dB	
SFDR2/3	106 dBc	Note 1
CNR	63 dB	Notes 2, 3, 4
Output IP3	16 dBm	
OP1dB	0 dBm	
Intermodulation Distortion	>40 dBc	@ 2 Tones, -13 dBm each
Input Power dynamic Range	-60...0 dBm	Total power
Damage RF Input Level	12 dBm	Total power
Maximum allowable optical Losses	25 dB	
Isolation	>60 dB	between 10 MHz and 700...2300 MHz

Note 1: Pin = -15 dBm, IM3 = 44 dBc

Note 2: Pin = -15 dBm

Note 3: 36 MHz window

Note 4: with back to back fiber connection (2 m) and minimum noise figure

TECHNICAL DATA DEV 7244 & DEV 7344

COMMON OPTICAL SPECIFICATIONS	VALUE	CONDITION
Fiber Type	Single Mode 9/125 μ m	
Optical Connector	SC/APC, E2000/HRL, or FC/APC	Standard is SC/APC
TX SPECIFICATIONS (DEV 7244)		
Laser Type	DFB	
Laser Class (according to IEC 60 825-1)	Class 1M (low Risk to Eyes, no Risk to Skin)	
Optical Power Output	2 mW / 3 dBm	
Wavelengths	1550 nm 1310 nm	10 MHz 700...2300 MHz
Power Consumption	15 V; 400 mA	Without LNB power
Weight	~0.5 kg	
TX LNB POWER & CURRENT MONITORING (WITH APPLIED OPTION 35, ONLY)		
LNB Power	18+0/-3 V; max. 500 mA	
Alarm Indication	Via LED on the Front Panel & via Remote Communication	
RX SPECIFICATIONS (DEV 7344)		
Wavelength Range	1100...1650 nm	
Min. optical Input Level (optical Sensitivity)	-22 dBm	
Damage optical Input Level	+10 dBm	
Power Consumption	15 V; 400 mA	
Weight	~0.3 kg	
TX & RX RF SENSING		
Adjustable Threshold Level (THL)	0 dBm > THL > -50 dBm (Factory Setting: -30 dBm)	Note 1
Threshold Level Accuracy	\pm 3 dB	
Threshold Repeatability	<0.5 dB	
Alarm Indication	Via LED on the Front Panel & via Remote Communication	
TX & RX GENERAL SPECIFICATION		
Size	4 HP (20 mm) Width, 3 RU (133 mm) Height, 3.94" (100 mm) Depth	
ETS 300019 Part 1-3 Class 3.1	ETS 300019 Part 1-3 Class 3.1E	

Note 1: The adjustable threshold level (THL) for the 10 MHz path of the DEV 7244 and of the DEV 7344 is:
+10 dBm > THL > -30 dBm, the factory setting is -10 dBm

ORDER INFORMATION

PRODUCT	
DEV 7244	Optribution® Transmitter; 10 MHz, 700...2300 MHz; SC/APC; Single Input
Option 35	Dual Inputs
DEV 7344	Optribution® Receiver; 10 MHz, 700...2300 MHz; SC/APC; Single Output with adjustable Gain
Option 36	Dual Outputs
OPTICAL CONNECTOR OPTIONS	
Option 07	FC/APC Optical Connector
Option 08	E2000/HRL Optical Connector