

ACI 5019 Series ET5019-1550 nm DFB Downstream External Modulation Transmitter



The ET5019 is an 1RU stand-alone 1550 nm downstream DFB external modulation transmitter. Used for CATV, FTTX, broadband video, and data transmission applications.

Features

- 1U 19 inch rack housing
- 45 to 870 MHz forward bandwidth
- Excellent CNR and low distortion performance
- Adjustable or fixed SBS (Stimulated Brillouin Scattering) threshold 13 dBm, 16 dBm, and 18 dBm
- Microprocessor control & monitoring
- Selectable automatic/manual gain control mode
- Front panel LCD display
- RS 485 interface for remote monitoring and control
- 2 optical output ports

Specifications

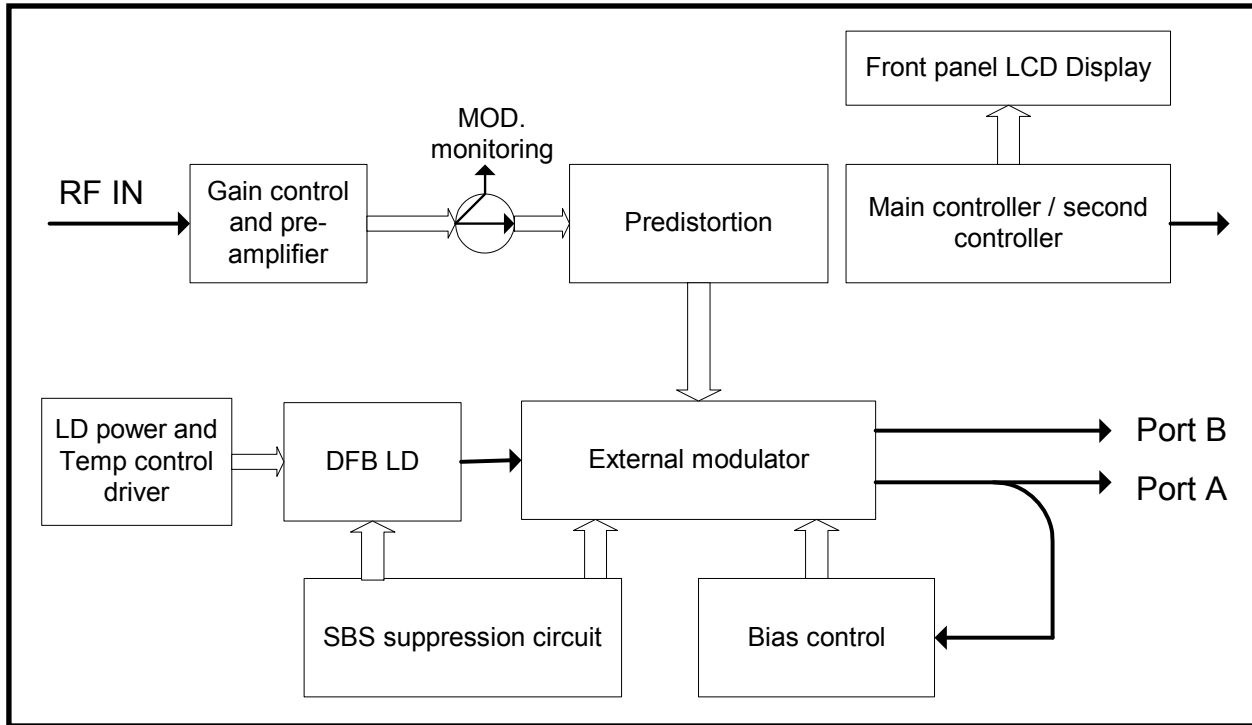
ACI Communications, Inc.			ET5019 1550 nm Optical Transmitter
STATION PARAMETERS:			
General	Conditions	Units	Specification
Laser type			Cooled DFB LD with isolator
Optical wavelength		nm	1540 to 1560
Connector type			SC / APC or FC /APC with shutte
Laser RIN noise density		-dB / Hz	≤160
Optical power		dBm	≥7
Optical output ports			2
SBS suppression threshold		dBm	13, 16, 18 fixed or 13, 16, 18 adjustable
RF PARAMETERS			
Operating bandwidth		MHz	45 to 870
Channel loading		ch	45 to 550 MHz for 79 NTSC or 60 PAL
RF input impedance	unbalanced	Ω	75
RF input return loss		-dB	≤16
RF input level	20 dBmV/ch nominal value @ 79 NTSC channels loading with MGC	dBmV/ch	15 to 25
OMI	Analog channels	%	3 ±0.25
Flatness		±dB	0.75
Test point		-dB	20 ±1
ELECTRICAL/ENVIRONMENTAL/MECHANICAL			
Connector type			F type female
Control interface			RS485 Proxy or RJ45 Ethernet
Power supply			90 to 260 VAC, 50/60 Hz, 60 W
Power requirement	max.	W	45
Operating temperature		°C	0 to +50
Storage temperature		°C	-20 to +60
Operating humidity	max.	%	85
Dimensions (d x w x h)		mm	350 x 485 x 45
Weight		Kg	<6.5

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Revision Date: 1/5/2009

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LINK PERFORMANCE			
General	Conditions	Units	Specification
13 dBm SBS			
EDFA output power 13 dBm and after 50 Km add another 13 dBm EDFA, (100 Km SMF + passive loss), 0 dBm input receiver			
Carrier-to-Noise Ratio (CNR)		dB	49.5 typical (49.0 min)
Composite Second Order (CSO)	@ Port A	-dBc	65
	@ Port B	-dBc	63
Composite Triple Beat (CTB)		-dBc	65
Cross Modulation (XMOD)		-dBc	65
16 dBm SBS			
EDFA output power 16 dBm (64 Km SMF + passive loss), 0 dBm input receiver			
Carrier-to-Noise Ratio (CNR)		dB	52.5 typical (51.5 min)
Composite Second Order (CSO)	@ Port A	-dBc	65
	@ Port B	-dBc	63
Composite Triple Beat (CTB)		-dBc	65
Cross Modulation (XMOD)		-dBc	65
18 dBm SBS			
EDFA output power 18 dBm (50 Km SMF + passive loss), 0 dBm input receiver			
Carrier-to-Noise Ratio (CNR)		dB	52.5 typical (51.5 min)
Composite Second Order (CSO)	@ Port A	-dBc	65
	@ Port B	-dBc	63
Composite Triple Beat (CTB)		-dBc	65
Cross Modulation (XMOD)		-dBc	65
Test Condition			
<ol style="list-style-type: none"> 1. Input power 0 dBm @ ref receiver 2. All fiber @ 0.25 dB/Km + 1 dB passive loss 3. Room temperature 25 °C ±5 °C (for 0 °C and 50 °C, CSO/CTB would be lower 2 dBc, CNR would be lower 0.5 dB) 4. 79 CW carriers (NTSC-channel loading) 			

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Block Diagram



Order Information

