ACI Communications, Inc.®

Serving the CATV Industry Since 1986

ACION 210
1002 MHz Indoor Optical Node

ACI's 1002 MHz ACION 210 is one of the smallest fully featured bi-directional nodes on the market. The optical receiver has an amazing high output level of 22 dBmV at a 0 dBm optical input. With LED's for power on, laser on, and optical power, forward and reverse -20 dB test points, input and output optical level test points, this node has all of the setup features that are included in a conventional nodes in a housing the size of a standard drop amplifier. This node also offers a complete selection of reverse transmitter options including 1310 nm FP, 1310 or 1550 nm DFB, DFB CWDM (1471 to 1611 nm) and a 1550 nm DFB with an internal WDM.

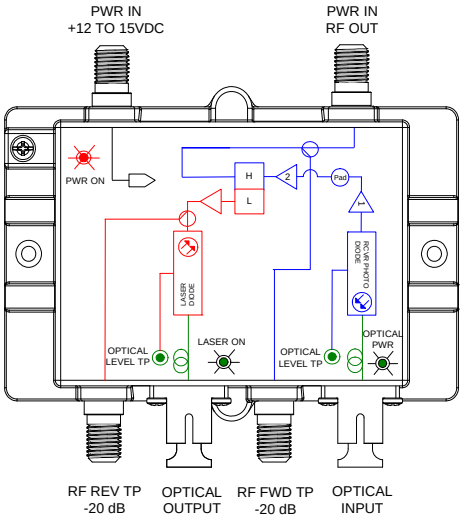
FEATURES:

- Forward 1002 MHz / Reverse 5 to 42 MHz
- FP, DFB and DFB CWDM transmitters available
- Forward and reverse -20 dB RF & 1 V/mW input/output optical test points
- Forward receiver operates at -6 to +2 dBm optical input and from 1200 to 1600 nm wavelength
- LED's for power on, laser on and optical power
- 6 Kv combination wave surge protection on the transformer (IEEE587 category B3)
- High performance "F" connectors - SCTE compliant
- Remote or co-located powering capability

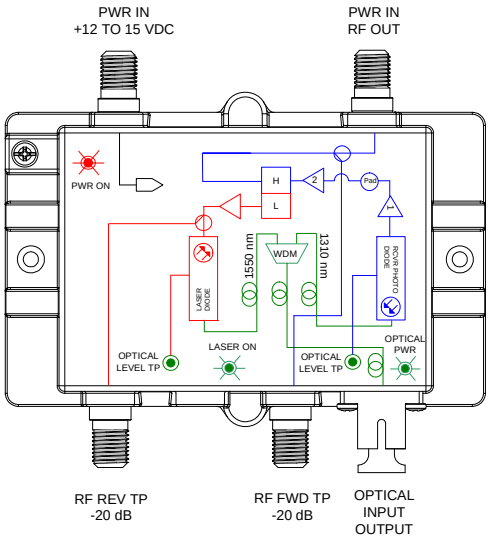
APPLICATIONS:

- RF reverse upstream insertion port for applications such as distance learning, live events coverage, and security or traffic monitoring
- Cost affective for use in high density application such as business parks, hospitals, schools/universities, PEG and MDU applications
- Perfect for high security LAN network applications
- Perfect for temporary node applications to keep the system up and running while the permanent node is repaired or replaced
- Can be used to expand the reverse path bandwidth by node splitting
- HE/Hub/Remote TVRO site interconnects

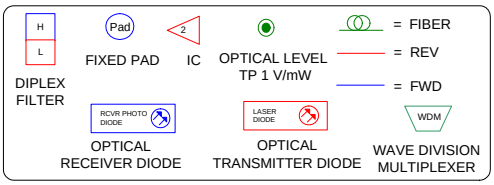
ACION 210 1002 MHz INDOOR OPTICAL NODE



ACION 210 W/WDM 1002 MHz INDOOR OPTICAL NODE



Legend



ACI Communications, Inc.			Indoor Optical Node ACION 210	
Station Parameters: Forward Path				
General Performance	Conditions	Units	Specifications	
Bandwidth		MHz	54 to 1002	
Flatness	Worst Case	±dB	0.5	
Impedance		Ohm	75	
RF return loss	Worst Case	-dB	17	
RF test point	Directional coupler	-dBc	20.0 ±0.5	
Optical test point		V/mW	1.0 ±0.1	
RF output level	@ -1 dBm Optical input OMI=3.4% 78 channels loading +450 digital	dBmV	20	
Carrier-Noise-Ratio (CNR)		dB	>51	
Composite Triple Beat (CTB)		-dBc	<65	
Composite Second Order (CSO)		-dBc	<65	
Cross Modulation (XMOD)		-dBc	<65	
Optical Parameters				
Optical receive power		dBm	-6 to +2	
Wavelength		nm	1200 to 1611	
Station Parameters: Reverse Path				
General Performance	Conditions	Units	Specifications	
Bandwidth		MHz	5 to 42	
RF input level		dBmV	20	
Flatness	Worst Case	±dB	0.75	
Impedance		Ohm	75	
RF return loss	Worst Case	-dB	17	
RF test point	Directional coupler	-dB	20.00 ±0.75	
Optical test point		V/mW	1.0 ±0.1	
Link Performance				
Type of transmitter		N / A	FP	DFB
Reverse channel loading	@ -4 dB with standard receiver	N / A	T9 & T10	T7 - T12
CNR	Worst Case	dB	>45	>55
DTO (FP) CTB (DFB)	Worst Case	-dBc	<45	<55
DSO (FP) CSO (DFB)	Worst Case	-dBc	<45	<51
Environmental				
Operating temperature		°F (°C)	-40 to 140 (-40 to +60)	
DC voltage input range		VDC	12 to 15	
Power consumption		Watts	3.1	
RF ports surge protection	A3 ring wave	KV	6	
Transformer port surge protection	B3 combination wave	KV	6	
RF output stability over temperature		±dB	2	
Physical				
Optical connectors	SC/APC standard	N/A	SC/APC, SC/UPC, FC/APC, or FC/UPC	
LED's		N/A	Power on & Optical input power & Laser on	
Dimensions (H X W X D)		In, (cm)	5 X 4.8 X 1.5 (12.7 X 12.1 X 3.8)	
Weight		lbs. (kg)	2.2 (1.0)	

Revision date: 5/25/2010

ACION 210 Configuration Sheet

Customer: _____

Created By: _____ Order Date: _____

ORDERING MATRIX

May 25, 2010

Position	1	2,	3	4	5	6	7	8	9	10
PART NUMBER	A	2	1	0	-	4				

2-3-4 [ ][ ][ ] **CONFIGURATION**
210 = Transmitter and Receiver 1002 MHz

6 [ ] **DIPLEX FREQUENCY SPLIT**
4 = 42/53 1002 MHz

7 [ ] **OPTICAL CONNECTOR TYPE**
1 = SC/APC (Standard)
2 = SC/UPC
3 = FC/APC
4 = FC/UPC

8 [ ] **TRANSMITTER TYPE FP & DFB**
P = Uncooled 1310 nm FP (0.5 mW)
H = Uncooled 1310 nm FP (2.0 mW) W/Isolator
J = Uncooled 1310 nm DFB (1.0 mW)
B = Uncooled 1310 nm DFB (3.0 mW)
C = Uncooled 1550 nm DFB (2.0 mW)
E = Uncooled 1550 nm DFB (2.0 mW) w / WDM

TRANSMITTER TYPE DFB CWDM
A = Uncooled 1471 nm DFB CWDM (2.0 mW)
G = Uncooled 1491 nm DFB CWDM (2.0 mW)
V = Uncooled 1511 nm DFB CWDM (2.0 mW)
L = Uncooled 1531 nm DFB CWDM (2.0 mW)
W = Uncooled 1551 nm DFB CWDM (2.0 mW)
M = Uncooled 1571 nm DFB CWDM (2.0 mW)
N= Uncooled 1591 nm DFB CWDM (2.0 mW)
T= Uncooled 1611 nm DFB CWDM (2.0 mW)

9 [ ] **TRANSFORMER TYPE**
0 = None
1 = North America
2 = International/Europe
3 = Japan
4 = Australia
5 = Argentina
X = Other (Contact Product Management)

10 [ ] **CUSTOM FEATURE**
0 = None
X = Determined by Product Management

NOTES:

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