

The logo for ACI, consisting of the letters 'ACI' in a bold, white, sans-serif font, followed by a registered trademark symbol (®).

ACI[®]

PRODUCT CATALOG

HEADEND

DSIM

OPTICAL NODES

AMPLIFIERS

SUBSCRIBER/PREMISE

PASSIVE OPTICAL NETWORK

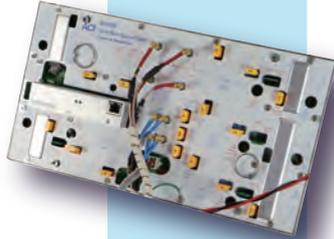
ACI

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Upgrade
modules
compatible
with
SA6940



Drop in RF Module
up to 59dBmV output
at 1.2GHz

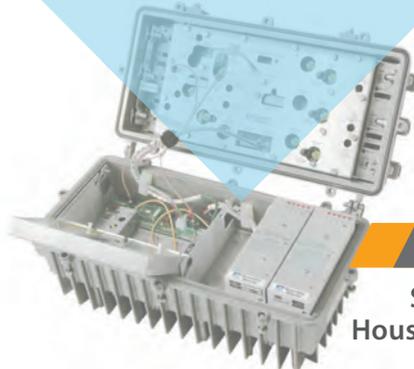
Remote PHY
with 1 or 2
modules



Digital / Analog
Transmitter options



40 - 90 VAC
Power Supply



SA6940

Same Size External
Housing as 6940 Nodes

NEW

Nodes

N5022 N5069

Optical Node
4x4 Fully Segmentable



The N5022 / N5069 1.2 GHz is a 4-output 4x4 fully segmentable optical node that is capable of providing up to 59 dBmV output at 1218 MHz with an optical input range from -8 dBm to +2 dBm. The node can have up to four optical receivers and four optical transmitters. Replacing conventional analog optical modules, two Remote PHY modules can be integrated into the node to provide high speed full digital optical link for better RF signal quality to meet high-order QAM modulation and data transmission rate as required by DOCSIS 3.1 standard.

- Four driven output ports
- Compact size for a 4x4 segmentable node
(8.44" H x 20.22" W x 10.73" D)
- Status monitoring
- Plug-in forward and reverse configuration modules allows for easy field reconfiguration to add or remove segmentation as needed
- DFB, CWDM, DWDM & Digital return transmitters available
- Remote PHY module is available for digital fiber link (optional)
- 40/90 VAC switch-mode power supply with built-in Triac surge protect

Nodes

ACION 3422

Optical Node
2x2 Fully Segmentable



The ACION 3422 1GHz is a 4-output 2x2 fully segmentable optical node that is capable of providing up to 52 dBmV output at 1002 MHz and has an optical input range from -3 dBm to +2 dBm.

- Four driven output ports
- FP, DFB, CWDM, DWDM & Digital transmitters available
- Redundant receiver & transmitter (optional 1:4 only)
- Mid Split Return Options (42, 85 or 204 MHz)
- Plug-in forward and reverse configuration modules allows for easy field reconfiguration to add or remove segmentation as needed
- 40/90 VAC switch-mode power supply



ACION 1002 & 1042

Optical Node
1002 MHz (1, 2, or 4 Output)

The ACION 1002 and 1042 series are compact economically priced 1, 2 or 4 outputs nodes that are ideal for use in HFC, fiber deep, MDU or commercial architectures. The node can be configured with either a DFB or CWDM DFB reverse path transmitter.

- 1, 2 or 4 outputs
- - 20 dB directional coupler test points
- DFB and CWDM transmitters available
- 40 to 90 VAC (cable) or 90 to 240 VAC (mains)
- Up to 46.0 dBmV out at 1002 MHz on each output port
- Pad adjustable linear equalizers standard
- Mid Split Return Options (42, 85 or 204 MHz)

Amplifiers

1.2 GHz SDA Amplifiers

Distribution Amplifiers

1218 MHz



Consumer bandwidth demand continues to grow at a rapid rate every year. As a result, cable operators with DOCSIS-based equipment need to future proof their networks for reduced service group sizes and ultimately double or quadruple bandwidth speeds. The SDA 1218 MHz Amplifiers helps to make these demands a reality. The ACI 1218 MHz SDA amplifiers are the latest-generation broadband amplifier in the ACI SDA platform. The Gallium nitride (GaN) technology supports high RF output levels up to 57 dBmV.

- 1218 MHz amp can be dropped into the 750, 870 or 1002 MHz spacing
- Return options (42 MHz, 85 MHz or 204 MHz.)
- Standardized housing between amplifier types
- Patented DSIM AGC Technology
- Pad adjustable forward and return EQ's that eliminates the need to stock different EQ values
- Increased reliability with higher surge protection GaN gain stages
- Ideal for fiber deep networks with the extended reach of the amplifiers or traditional HFC networks to increased performance & reliability

ASEM 1.2GHz Drop in Modules Compatible with Motorola®

Distribution Amplifiers

1218 MHz



The ASEM Moto BLE and MB 1.2G RF upgrade modules are compatible with the Motorola® Starline® MB Mini-Bridger and BLE Line Extender.

- 1218 MHz can be dropped into the 750 , 870 or 1002 MHz spacing
- Return options (42 MHz, 85 MHz or 204 MHz.)
- Ideal for traditional HFC networks upgrade
- Pad Adjustable equalizers standard
- Automatic Gain Control with the Patented DSIM technology
- Increased reliability with higher surge protection in the GaN hybrids
- Up to 3 dB higher output levels with same distortion performance with GaN Hybrids

Amplifiers

ASEM 1.2 GHz Drop in Modules Compatible with SA[®] / Cisco[®]

Distribution Amplifiers

1218 MHz



The ASEM CISCO 1.2G RF upgrade modules are compatible with the SA[®]/ Cisco[®]/ GainMaker[®]/ and System II, III.

- 1218 MHz can be dropped into the 750 , 870 or 1002 MHz spacing
- Return options (42 MHz, 85 MHz or 204 MHz.)
- Ideal for traditional HFC networks for increased performance & reliability
- Ideal for fiber deep networks with the extended reach of the amplifiers
- Pad Adjustable equalizers standard
- Automatic Gain Control with the patented DSIM
- Increased reliability with higher surge protection in the GaN hybrids
- Available modules: BT (Balanced Triple), UBT (Un-balanced Triple), HGD (High Gain Dual) and LE (Line Extender)

ASEM 1.2 GHz Drop in Modules Compatible with C-Cor® / Arris®

Distribution Amplifiers

1218 MHz



The ASEM C-Cor®/Arris® 1.2G RF upgrade modules are compatible with the FMT & FMB 700, 800 and 901e and the FM331e, E6 and E7 line extenders.

- AFM-T Trunk is compatible with Arris® 901e FMT and is a 1G drop-in replacement for the C-Cor® FNT700, FNT800, FNT900
- AFM-B Bridger is compatible with Arris® 901e FMB and is a 1G drop-in replacement for the C-Cor® FNB700, FNB800, FNB900
- AFM-L Line Extender is compatible with Arris®/C-Cor® FM331e and is a 1G drop-in replacement for the C-Cor® E6 and E7 Line Extender
- AFM-E Line Extender is compatible with Arris®/C-Cor® 900 LE
- Easy, simple setup
- Return options (42 MHz, 85 MHz or 204 MHz.)
- Pad Adjustable equalizers standard
- Automatic Gain Control with the patented DSIM
- Increased reliability with higher surge protection in the GaN hybrids

Amplifiers

Amplifier Mid/High-Split Return Kit

1.2 GHz

Step 1:
Change Return EQ



Step 2:
Change Return
NetBoard



Step 3:
Change DFU



Easily upgrade SDA and ASEM amplifiers to a mid-split return.

Outdoor Mini Hub

H5000 Mini Hub



The H5000 is an Outdoor Mini Hub that provides an optical distribution point for downstream traffic and an aggregation point for upstream traffic, making it easy for cable operators to extend their fiber networks far beyond the traditional hub/headend infrastructure.

- Easily setup for RFoG or GPON
- 8-output C-band optical amplifier and 18 dBm per port
- 4 RFoG return receiver ports
- - 5 to + 8 dBm input for 1550 nm
- - 23 dBm to - 10 dBm return receiving
- 2 Digital Return Transmitters
- 256 HHP capability
- PON Inserting and bypass ports
- Redundant power supplies
- Upstream Optical AGC
- Local monitoring and setup GUI
- Mains 90-240 VAC or Cable 40-90 VAC powering options

EDFA

ED52XX Series

EDFA with WDM for (X)GPON RF overlay

Optional : Hardened for Outdoor Cabinet Environment



High-power rack mount multi-ports EDFAs. Designed for single channel or multi-channel wavelengths (ITU) with WDM for PON by-pass.

- 1545~1563 nm wavelength operating range
- 1, 2, 4, 8, 16 (1RU), 32 or 64 (2 RU) output ports
- Fits into a 19", 21" or 23" wide rack
- Can be mounted horizontally or vertically
- A high performance optical output driver circuit and laser TEC to provide a highly reliable EDFA
- A pump laser auto shutdown function to protect the unit from over powered
- LED indicator on the front panel shows the alarm status
- Supports SNMP for network management
- Additional Option for XGPON WDM
- Operation temperature range: 0°C to +50°C (indoor) -5°C to +65°C (outdoor)

EDFA

ACION 3958

Outdoor EDFA



The ACION 3958 is an outdoor EDFA with 8 output ports operated on constant output power mode. It is a single channel EDFA designed to amplify the optical signal in the wavelength range from 1540nm to 1560nm. It has a maximum total output power according to the application. It also has WDM devices integrated for combing GPON (IP) signals of wavelength 1310 (upstream) and 1490 (downstream) with 1550 broadcasting signals in the same fiber. The monitoring, alarm functions, and system information are provided with the real-time display on the front LCD panel and LED indicators. RJ45 interfaces for SNMP management is available by option.

- A high performance optical output driver circuit and laser TEC to provide a highly reliable EDFA
- A Built-in microprocessor allows the unit to monitor the system parameters
- A pump laser auto shutdown function is available
- LED indicator on the front panel shows the alarm status
- LCD display on the front panel shows the monitor parameters
- Operating temperature: - 20°C to + 65°C (standard)
- Built-in optical receiver for direct monitoring of CATV RF signal
- Supports firmware upgrade download

Headend

ACION 8000 Series

Headend Optical Transmission Platform



The ACION 8000 is a 3RU 19" wide rack unit which provides 16 slots that can accommodate the plug-in application modules and power supplies. The ACION 8000 is designed for maximum density and flexibility: Up to 12 ACION 8000 plug-in application modules, 2 power supplies and 1 control modules in the 3RU chassis. The dual transmitters can provide up to 24 transmitters per chassis, and the quad receivers can provide up to 48 receiver ports per chassis.



Variety of modules available including:

- 1.2 GHz DWDM Transmitter
- 1.2 GHz 1310 Transmitter
- CWDM Transmitter
- CWDM Receiver
- Quad/Dual 300 MHz Return Receiver
- 1550 nm C-band EDFA
- Digital Return Receiver
- Dual 1.2 GHz DWDM Transmitter
- Dual 1.2 GHz 1310 Transmitter
- DC or AC Power Supplies

Forward OTX

DT8130

1.2GHz 1310nm

Forward Optical DM Transmitter



The DT8130 series is a family of high performance head-end 1.2GHz forward optical direct modulation transmitter (Tx) for HFC or FTTH applications. The DT8130 series Tx is a 1RU 19" standard chassis and is available in several configurations to meet various network requirements. The transmitter's RF path employs several stages of RF amplification that includes single ended low noise high linear amplifiers and low noise push-pull amplifier from G7/EU brand name vendors. The DT8130 series Tx is available with optical power options from 3 dBm to 15 dBm.

- 19" standard 1RU rack mount design
- Transmission bandwidth up to 1.2GHz
- Cooled DFB laser diode with integrated optical isolator
- 1310 nm optical wavelength
- AGC/MGC selection
- Video/CW selection
- OMI level adjust
- User defined AGC setting
- Dual Hot-swappable Power Supply
- Remote control and monitor functions via HMS or SNMP
- - 20dB RF front-panel test point

Forward OTX

DT8150

1.2GHz 1550nm

Forward Optical DM Transmitter



The DT8150 series is a family of high performance head-end 1550nm 1.2GHz forward optical direct modulation transmitter (Tx) for HFC or FTTH applications. The DT8150 series Tx has a 1RU 19" standard chassis and is available in several optical DWDM wavelength options and configurations to meet various network requirements.

- 19" standard 1RU rack mount design
- Transmission bandwidth up to 1.2GHz
- Fiber distance up to 30 KM with user fiber length setting in 1 KM increment
- Cooled DFB laser diode with integrated optical isolator
- AGC/MGC mode selection
- 1550nm, standard ITU DWDM Ch15 to Ch72, 100 GHz spacing
- Video/CW Mode selection
- OMI level adjust
- User defined AGC setting
- SBS: 18dBm
- Dual Hot-Swappable power supply
- - 20dB RF front panel test point
- Remote control and monitor functions via HMS or SNMP

GPON

LT806 OLT Series

6RU Chassis Type GPON OLT

Supporting Up to 96 GPON Ports



- 6RU Chassis GPON OLT System
- 6 Service Modules
 - Up to 96 GPON ports per chassis (16 ports per service module)
 - Can support up to 6,144 subscribers with 96 GPON ports (with 1:64 split ratio)
 - Ready for up to 48 XG-PON ports per chassis (8 ports per service module)
- 2 Switching Fabric Modules
- 2 Uplink Modules
 - 4 x 10GE/GE (SFP/SFP+) uplink interface per module
- Multi-service chassis for FTTx deployments with full redundancy
- Supports VoIP, IPTV, high-speed internet, mobile, etc.
- Non-stop forwarding and routing based on distributed architecture
- High capacity GPON access and 10GbE uplink and line rate performance
- Reliable FTTx service with 1+1 hot-swappable power redundancy solution
- Realtime network traffic monitoring, analysis, diagnostic
- Fully Managed via ACI's Network Management System
- Common CLI via console/telnet
- SNMP v2 / v3 with RMON, Alarms
- L2 / L3 / L4 Classification / Priority Management

LT802 OLT Series150

2RU Chassis Type GPON OLT
Supporting Up to 32 GPON Ports



- 2RU Chassis Type GPON OLT System
- 2 Service Modules
 - Up to 32 GPON ports per chassis (16 ports per service module)
 - Can support up to 4,096 subscribers with 32 GPON ports (1:128 split ratio)
 - Ready for up to 16 XG-PON ports per chassis (8 ports per service module)
- 2 Switch Fabric with Uplink Interface Module
 - 4 x 10GE/GE (SFP/SFP+) Uplink interface per module
- Multi-service chassis for FTTx deployments with full redundancy
- Supports VoIP, IPTV, high-speed internet, mobile, etc.
- Non-stop forwarding and routing based on distributed architecture
- High capacity GPON access and 10GbE uplink and line rate performance
- Reliable FTTx service with 1+1 hot-swappable power redundancy solution
- Selective service/uplink modular units for flexible network
- High capacity GPON access and 10GbE uplink and line rate performance
- Realtime network traffic monitoring and analyzing
- Fully Managed via ACI's Network Management System
- Common CLI via console/telnet
- SNMP v2 / v3 with RMON, Alarms
- L2/L3/L4 Classification / Priority management

GPON

LT500 OLT Series

1RU Standalone Type GPON OLT
Supporting Up to 16 GPON Ports



- 1RU standalone GPON OLT system
- 4 / 8 / 16 GPON ports
- Low Power consumption: 44W/48W/61W
- Uplink support 4 ports of 1GE/10GE SFP/SFP+
- 4 ports of 1GE Ethernet (RJ45) Interface
- GPON Bandwidth: 2.5 Gbps (downstream) / 1.25 Gbps (upstream)
- Cost-effective solution for low populated regions
- Supports VoIP, IPTV, high-speed internet, mobile, etc.
- Modular-type power supply supporting both AC and DC power
- Reliable FTTx service with 1+1 hot-swappable power redundancy solution
- Improved QoS and differential traffic service
- Fully Managed via ACI's Network Management System
- Common CLI via console/telnet
- SNMPv2/v3 with RMON and Alarming
- L2 / L3 / L4 Classification / Priority Management

GPON

GEH39Outdoor
OLT and EDFA

- Outdoor Node Type EDFA and OLT
- 4 output ports including GPON signals (1310 nm/1490 nm) and RF broadcast signal (1550nm)
- GE uplink wavelengths: 1570 nm (upstream) and 1270nm (downstream)
- High performance optical output driver circuit and laser TEC provides a highly reliable EDFA
- Built-in microprocessor allows the unit to monitor the system parameters and alarms
- Built-in WDMs for GPON + RF Overlay optical signal
- The pump laser auto shut downs at low input for safety
- Built-in device management webpage
- Supports remote firmware download and upgrade
- Built-in data log and up to 30-day operation history analysis
- Built-in RJ45 for remote SNMP network management

GPON

NU60XM ONT Series

FTTH / GPON

OLT

NU60GM

- ITU-T G.984.x compliant GPON ONT
- Data rate of 1.2 Gbps (US) / 2.5 Gbps (DS)
- 4 x 10/100/1000Base-T ports (RJ45)
- 1 x FXS voice ports (RJ11)
- Wi-Fi: IEEE 802.11 a/b/g/n/ac
- Both L2 switch & L3 routing gateway
- L3 Routing: NAT / NAPT address translation



NU60RM

- ITU-T G.984.x compliant
- Data rate of 1.2 Gbps (US) / 2.5 Gbps (DS)
- 4 x 10/100/1000Base-T ports (RJ45)
- 2 x FXS voice ports (RJ11)
- 1 x RF port for RF 1550nm overlay network (F-Connector)
- Built-in concurrent dual-band Wi-Fi:
 - IEEE 802.11b/g/n, 2T2R
 - IEEE 802.11ac, 2T2R
- Both L2 switch & L3 routing gateway
- L3 Routing: NAT/NAPT and firewall



ACION 210

1002 MHz
Indoor Optical Node



ACION 210



ACION 210 w/WDM

The ACION 210 is one of the smallest fully featured bi-directional nodes on the market. The optical receiver has an output level of 22 dBmV at a 0 dBm optical input. With LEDs for power on, laser on, and optical power, forward and reverse -20 dB test points, input and output optical level test points. This node also offers a complete selection of reverse transmitter options including 1310 or 1550 nm DFB, DFB CWDM and a 1550 nm DFB with an internal WDM.

- RF reverse upstream insertion port for applications such as distance learning, live events coverage, and security or traffic monitoring
- Cost effective for use in high density application such as business parks, hospitals, schools/universities, PEG and MDU applications
- Perfect for high security LAN network applications
- Ideal for temporary node applications to keep the system up and running while the permanent node is repaired or replaced

DSIM



DSIM® Series

Digital Station Intelligence Manager

The ACI Digital Station Intelligence Manager (DSIM) is a next generation gain control module with comprehensive yet extremely cost effective local station diagnostics on board. In the DSIM AGC module the gain control function allows for any QAM or analog carrier from channels 52 to 142 to be selected as pilot or can be set to operate in the thermal AGC mode. The DSIM AGC modules are simple to use, reliable, power efficient, cost effective, and an augmentation to the OSP maintenance team’s maximum uptime program.



DSIM-MV
for Philips®/Magnavox®
Diamond Type 1, 2, 3



DSIM-CJ
for Arris®
FM601e-T/B



DSIM-GI
for General Instrument®
Motorola®, BLE, MB, BT
Post 750-DH 6-pin



DSIM-JD
for Jerrold® JLX Line
Extender 750-D/H 5-pin



DSIM-SS 01 (w/o EQ)
for Scientific Atlanta®
System Amplifier II & III



DSIM-SS 02 (w/ EQ)
for Scientific Atlanta®
System Amplifier II & III



DSIM-A
for Augat® ACI
SDA and ALX



DSIM-SG
for Scientific Atlanta® / Cisco®
GainMaker



DSIM-AF
for Antec®
FTMB-75 Series



DSIM-CC
for C-Cor® / Arris®
FlexNet E7 Series LE/Flex Max 301e



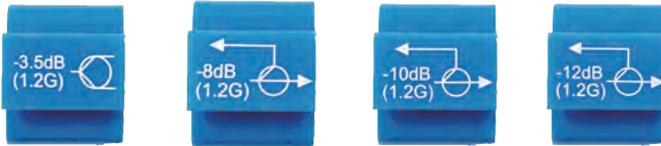
DSIM-CF
for C-COR® / Arris®
FlexNet FNT & FNB 700/800
FlexNet FNT & FNB 900
Navicor NL Series/Flex Max 901e



DSIM-CG
for Philips® / Magnavox® / C-Cor®
6-LE97/98 LE/Spectrum 2000

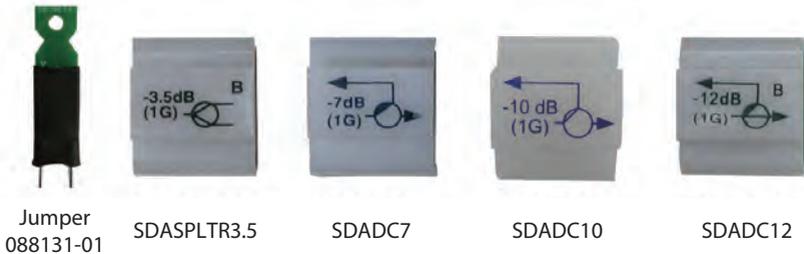
Accessories

Jumper / Splitter Directional Couplers



Used in the following products.

- SDA 1.2G Series
- ASEM 1.2G Series



Used in the following products.

- SDAF 750 or 870 MHz 2 or 3 output bridger
- SDAM 1002 MHz 2 or 3 output bridger
- ASEM Moto MB 2 or 3 output bridger amplifiers
- ASEM C-cor Trunk & Bridger
- ACION 1000 & 1002 1 or 2 output optical
- ACION 1042 2 or 4 output optical node

Jumper / Splitter Directional Couplers

Vertical



Jumper
088325-01

SDASPLTR3.5

SDADC7

SDADC10

SDADC12

Vertical: Used in the following products.

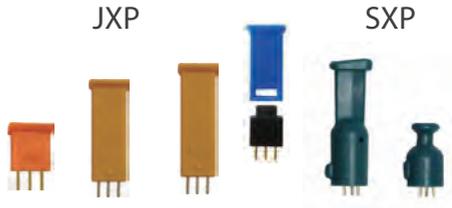
- SDAF 1002 MHz 2 or 3 output bridger
- ASEM Cisco LGD & HGD amplifiers

Accessories

JXP Pad Adjustable EQ



Reverse Equalizer



PADS

0 to 20 dB in .05 dB Steps



RF Probe for Test Points 1.57" Long

Part number: TP-7504



RF Probe for Test Points 5.5" Long

Part number: 100685-01

Accessories

Reverse Path Rejection Filters

Cut down your return band noise!



14 MHz Reverse Rejection Filter



8 MHz Reverse Rejection Filter



Reverse Rejection Filter Bypass

		RPRFLTR-8	RPRFLTR-14
Pass Band	Bandwidth, MHz	13 - 200	20 - 200
	Insertion Loss, dB (MIN)	- 1.50 @ 13 - 20 MHz	-
	Insertion Loss, dB (MIN)	- 1.00 @ 20 - 200 MHz	- 1.00 @ 20 - 200 MHz
	Input Return Loss, dB	- 18 (MAX)	- 18 (MAX)
	Output Return Loss, dB	- 18 (MAX)	- 18 (MAX)
Stop Band	Bandwidth, MHz	5 - 8	5 - 14
	Attenuation, dB	- 30 (MAX)	- 30 (MAX)



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