Lindsay DOCSIS Gateway Specifications

Cable Modem	
Model	RCA DCM425
Standards	DOCSIS 2.0
Downstream	
Modulation	64/256 QAM
Centre Frequency Range	91–857 MHz
Channel Bandwidth	6 MHz
RF Input Sensitivity	+15 to –15 dBmV
Input Impedance	75 Ohm
Downstream	
Frequency Range	5–42 MHz
Upstream Modulation	8/16/32//64/128 QSPK or QAM
Channel Bandwidth	.2/.4/.8/1.6/3.2/6.4 MHz
Upstream Data Rates	5.12/10.24/30 Mbps
RF Output Level	+8 to +58 dBmV
Output Impedance	75 Ohm
Software	
Software Downloadable	Yes
SNMP Management	V2, V3
Security	BPI+
HTTP Based Management	Yes
HFC	
Test Points	–20dB relative to cable modem RF port
Pad Type	JXP, Separate Forward and Reverse
Temperature Range	–40 to +60 Deg C
EMI Isolation	100 dB (5 to 1000 MHz)
Surge Protection	Gas Discharge Tube
Powering	60 / 90 Vac (Pseudo Sine)
Power Consumption	10 W
Physical	
Dimensions	9 x 7.2 x 3.4 inches
Weight	1.6 KG (3.5 lbs)
Airtight	15 p.s.i

The DOCSIS Gateway

Use your preferred AP for the ultimate in low cost, custom tailored, DOCSIS based 802.11 infrastructure.
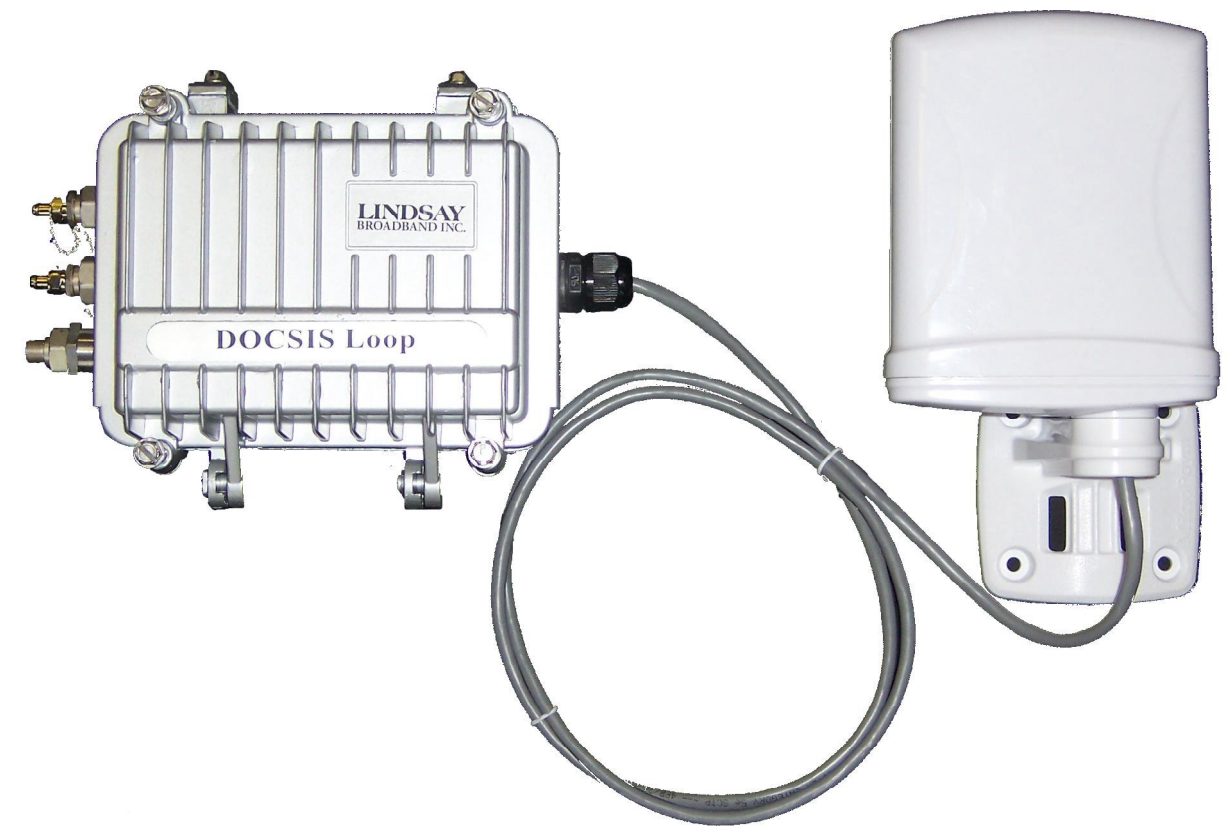
The DOCSIS Gateway allows the use of any low voltage Access Point on the HFC strand. You can use Lindsay recommended Mikrotik Access Points or Access Points from Ubiquiti, Compex, Alcon, etc. You can use any AP that accepts 12Vdc passive POE (4,6+, 7,8-) and that does not require more than 8 Watts. Other IP devices that meet the voltage and power requirements, like IP cameras, can also be used.

The DOCSIS Gateway was carefully designed to maintain the quality and reliably that the MSO needs while keeping cost at an absolute minimum.

Since the DOCSIS Gateway uses a standard cable modem and is wholly under control of the system operator, it can be used in conjunction with your SNMP monitoring system to evaluate the line conditions of your plant. Parameters such as Signal Strength, Signal to Noise Ratio and Bit Error Rate are all reported by the DOCSIS Gateway

Lindsay DOCSIS Gateway Features

Forward and Reverse Cable Modem "sweet-spotting" using commonly available JXP type pads.

Forward and Reverse –20dB Test points accurately reflect the signal levels seen by the cable modem. Complete with tethered dust caps.
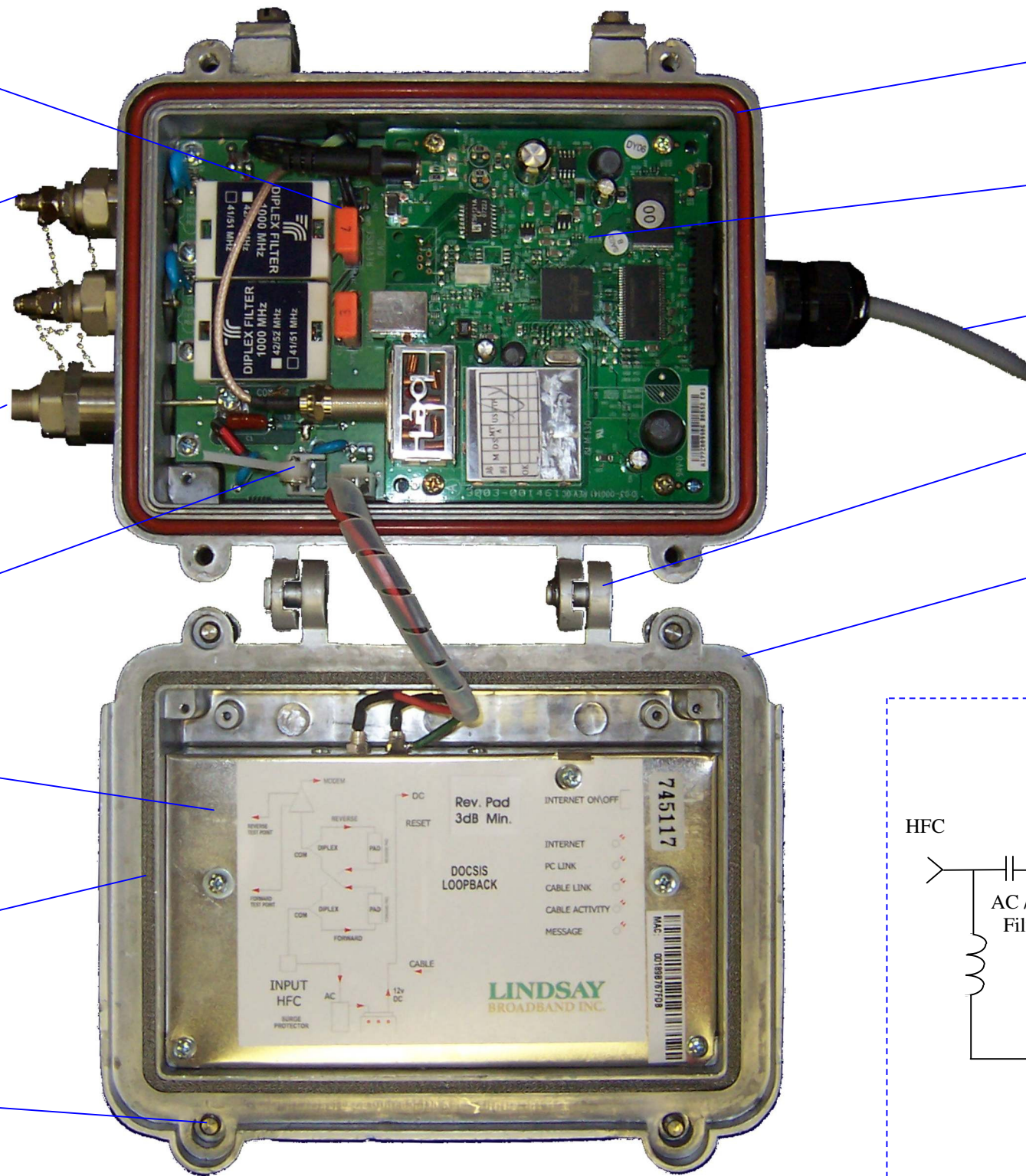
F-connector for connection to any coupler, power-passing tap, or as a network termination.

Industry standard gas discharge tube surge protection.

HFC type Automatic Switching mode Power Supply 60/90 AC voltages.

Knitted wire mesh gasket provides –100db EMI isolation.

All exposed hardware is Stainless Steel.

O-ring weather seal. Each DOCSIS Gateway is tested to be airtight at 15psi for 10 seconds.

Thomson DCM-425, Cable Labs certified, DOCSIS 2.0 cable modem

Five foot shielded and terminated CAT5e cable ready to connect to your device.

Clamshell design for maximum convenience and installer safety.

Painted cast aluminium housing for long life in the harshest environments.

Block Diagram
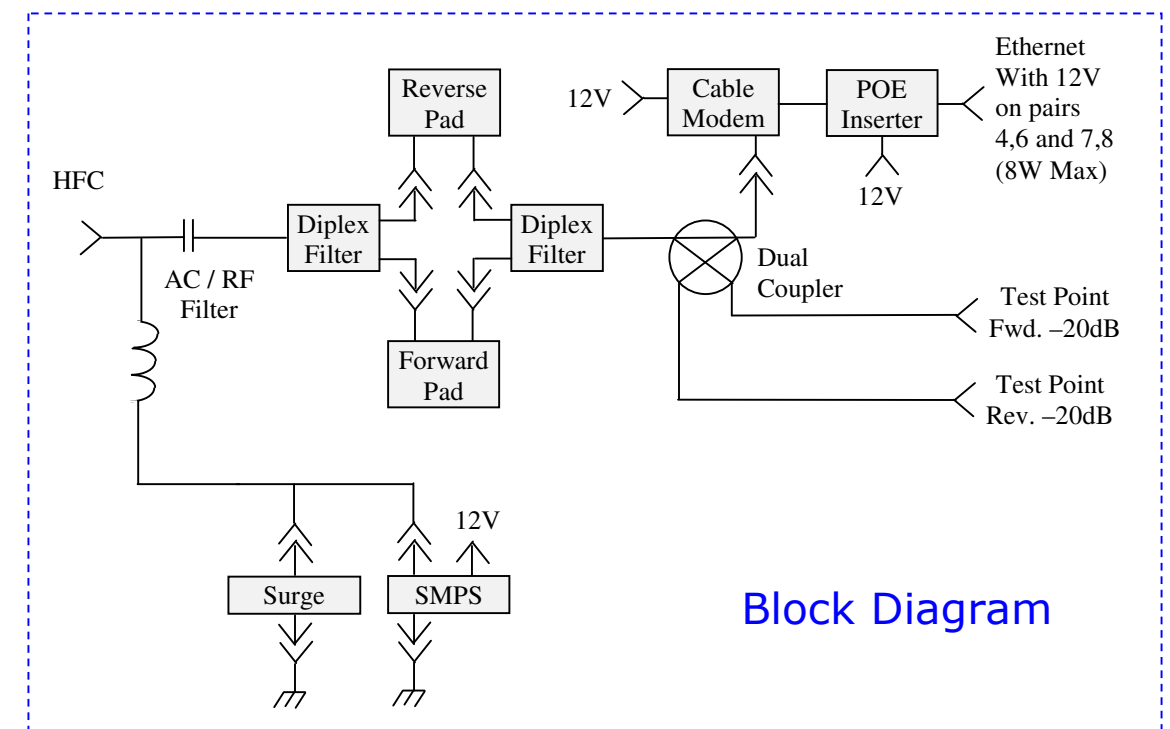
Using the DOCSIS Gateway

Lindsay provides two types of Access Point that are strand mountable and ready to play with the DOCSIS Gateway. Additionally, the resourceful system operator can roll his own solution by taking advantage of the many other Access Points that meet the DOCSIS Gateway's power capabilities.

The Lindsay Integrated Access Point

When using a panel antenna, the best place to put the router board is in the panel. Pigtail losses are reduced to a minimum. Service to the radio, which is the most vulnerable part, can be easily done by replacing the relatively inexpensive panel, without any impact on the HFC plant.

Lindsay offers a variety of panel antennas with integrated Mikrotik RouterBoards for operation at both 2.4 and 5.8 GHz.

This is the least expensive method of putting an AP on the strand.
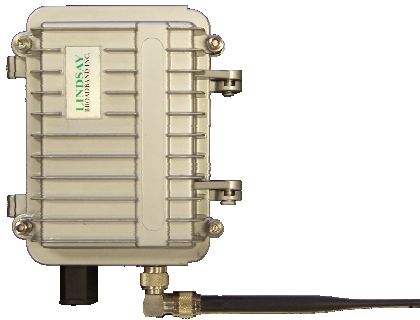
The Lindsay HAP-6000

Not all antenna gain and directivity options are available in panel form. In such cases the HAP-6000 is an ideal companion piece to the DOCSIS Gateway. This Hardened AP is based on the same Mikrotik RouterBoard used in Lindsay's premium line of HAPs and WAZUs. The included high power 802.11a/b/g radio allows complete freedom in band usage and operating range. With the optional second antenna port 802.11n is supported as well.

The Lindsay HAP-6000 uses the same strand mount housing as the DOCSIS Gateway. All features, including full environmental hardening, are maintained.

Let us help put your IP based device on the HFC Strand.

The usefulness of the DOCSIS Gateway doesn't end with 802.11 wireless. Any outdoor IP device can be used. IP camera's, PA's, and DECT base stations are just some of the possibilities.

Lindsay Broadband has many years experience in hardening devices through the use of CATV type housings. Environmental seal to IP-68 standards, per port surge protection, and thermal management issues are well understood and readily handled by our engineering team. Thorough testing in our well-equipped lab lets you deploy with confidence.

The Versatile
DOCSIS Gateway

Any 12V IP Device
- DECT SIP Base Station
- IP Public Address
- What can we help you put on the strand?

Related Products

SKU	Part Name	Description
5-1805	WAZU-8000A-SB5101-RB411-2	HFC powered, with DOCSIS backhaul. This unit effectively combines the DOCSIS Gateway and HAP-6000 in box. Many router-board and radio options including multi-radio.
5-1811	HAP-9000A-RB411-2	This POE powered AP meets CATV environmental protection requirements and is fully surge protected on all ports. Many router-board and radio options including multi-radio.
5-1573	WAZU-8000-SB5101-POE	802.3af compatible version of the DOCSIS Gateway. Delivers 15W of power at 48Vdc.
Indoor and Outdoor CPEs, Antennas, Pigtail Cables, Strand Mount Hardware, etc.		