

### Applications:

- Fiber to the Home Multiple Dwelling Units
- Mid-rise Apartments
- Garden-Style Apartments
- Condos and Townhomes
- Long-term Care Facilities
- Anywhere IP-based Triple Play services are to be delivered over existing coax wiring

### Key Highlights:

- Open Standards based
- Fast Installation
- Data Security Features
- 2 Ethernet SFP LAN/WAN Ports for GigE Networks
- 4 coax ports for Triple Play IP Services - IPTV, Internet and VOIP
- Also works with existing RF CATV Video
- Quality of Service and VLAN Termination
- 802.11x
- Block Broadcast Packets
- Remote management of IPC-1410 and attached clients

The IPcoax 1410 Coax QoS Ethernet Switch enables IP-based Video, Data and VoIP applications over existing coax cabling. The IPcoax 1410 is the industry leading solution solving the secure delivery of IP Multiservice in a high density coaxial environment.



The IPcoax 1410 delivers an impressive 400Mbps of usable bandwidth across multiple coaxial terminations. The units use Ether ring Gbe rate rack and stack technology allowing a "pay as you grow" revenue model. With scalability to over 40 units the IPcoax 1410 solution can scale to serve several hundred of end users connected on a coaxial network.

### IPcoax 1410 - The Ideal Solution for FTTH MDU Deployments

Easy service delivery to units using existing coax cable means no rewiring:

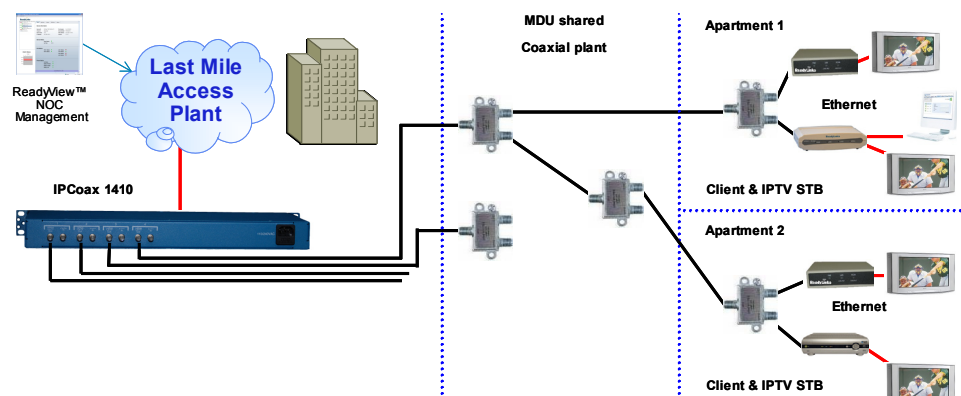
- Fast, secure and reliable Plug and Play solution reduces installation time
- Dynamic bandwidth allocation optimizes throughput based on activity
- Quality of Service and VLAN termination and tagging
- Multiple VLANs per HPNA Master (Triple Play Service)
- Data Security Features
- Added ARP Proxy and DHCP Helper
- Extends fiber optic data speed onto existing coax wiring

### Open Standards Based and Compatible with Existing RF Video

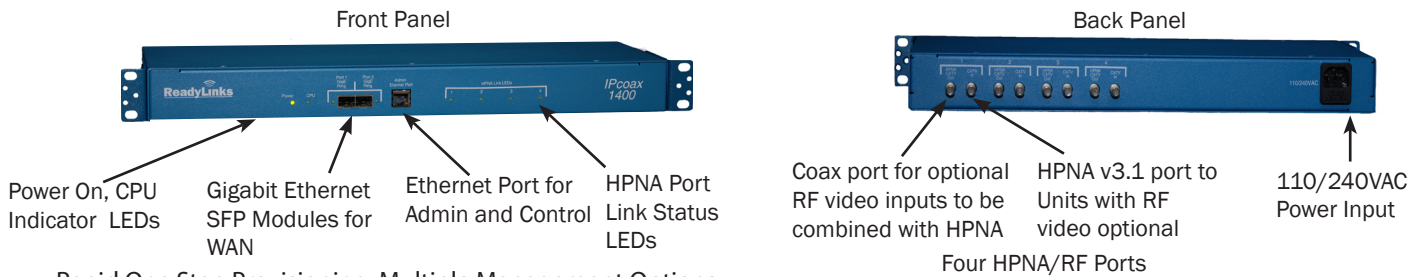
The IPcoax 1410 supports Gigabit Ethernet for optical delivery to the MDU and the HPNA v3.1 standard for Ethernet over coax. Existing RF CATV and HPNA share the same coax cable to be split/combined in the unit.

### IPcoax 1410 IP Video Deployment Example

Each IPcoax 1410 supports 4 units with up to 100Mbps IP Ethernet bandwidth dedicated to each unit. The IPcoax 1410 can be connected to the main Ethernet Switch in either an Ethernet Ring or Point-to-Point configuration. ReadyLinks IPcoax clients are used in each Unit to convert the coax to RJ-45 Ethernet connections.



## IPcoax 1410 Interfaces



### Rapid One Step Provisioning, Multiple Management Options

- Easy Plug and Play installation - connect fibers, connect coax cables and power-on.
- Remote management of IPCoax 1410 and attached clients in the dwelling units reduces maintenance calls
- ReadyLinks ReadyView Graphical User Interface shows status of all IPCoax 1410 and clients in the coax network and shows network performance statistics such as packet loss and signal to noise ratio.

<b>Specifications</b>	
<b>General Specifications</b>	
Catalog Number	IPC-1410-M-HN
Compatible Clients	CEB-422-M
Maximum Number of Clients per Port	16
Number of HPNA Ports	4
<b>Environmental Specifications</b>	
Operating and Storage Temperature	0 to 50° C, -25° C to 70° C
Input Voltage, Power Consumption	110-240 Volts AC (50-60 Hz)
Humidity	10 to 90% non-condensing
Certifications	UL, CE, CUL, FCC Part 15 Class B, EMC 89/336/EEC, ICES-003
<b>WAN and Service Ports</b>	
HPNA V3.1 Interface	Four (4) Coax Connectors.
Pass-through RF Interface	Four (4) Coax Connectors.
Ethernet Interface for Administration	One 10/100 Ethernet RJ-45 port, Automatic MDI/MDIX port for local craft access
WAN/LAN Connectivity	Two (2) SFP sockets supporting 1Gbps symmetrical Ethernet resilient ring. Works with dual or single fiber, single mode or multi-mode, short, medium or long reach SFPs. Supports copper SFPs
Ethernet Characteristics Over Ethernet SFP Ports	High performance look-up engine with support for up to 2048 MAC address entries with automatic learning and aging. Full IEEE 802.1Q VLAN ID processing, dynamic VLAN membership and VLAN tagging port selectable
Compatibility	All Ethernet Switch/Routers on LAN/WAN ports, HPNA 3.1 devices on coax
Modulation Type on Coax	Adaptive FDQAM and QAM, 2 to 16 Mbaud with 2-10 bit constellations
HPNA Transmit Level	0 dBm
Robustness	High immunity to RF and impulse noise. Adapts to varying line conditions
Protocol Layer Features	Master-controlled and peer-to-peer, MAC protocol, Link-layer Control Protocol, Convergence Sublayer Bridging External Networks and Protocols, Local and Remote Management
Quality of Service	Negotiated QoS flow parameters between devices at the endpoints of a flow in order to establish buffering and channel (BER/PER) constraints. Contract between Client device and Master constrains bandwidth, latency and jitter. Traffic classification - management, voice, video and data
Standards Compliance	IEEE802.3, IEEE802.3u, IEEE802.x, IEEE802.1D, IEEE802.1Q VLAN ID
<b>Mechanical Specifications</b>	
Dimensions, Weight	12"(L) x 19"(W) x 1.75"(H), (301mm x 408mm x 44mm), 9 lbs.

Note: specifications are subject to change. v1.6a