Wireless LAN Cable Router

Ambit's Wireless Cable Modem Router combines a robust cable modem with the freedom of wireless. With DOCSIS 2.0 and 802.11b/802.11g support, this is a perfect solution for MSOs who want to protect their investment by providing their subscribers with the leading technology. This is the ideal solution for both residential and commercial applications.

And speaking of leading technology, the Ambit Wireless Cable Modem supports CableHome. In fact, Ambit is one of the few companies to achieve CableHome Certification through CableLabs.

Here are some of the benefits to Ambit's Wireless Cable Modem Router:
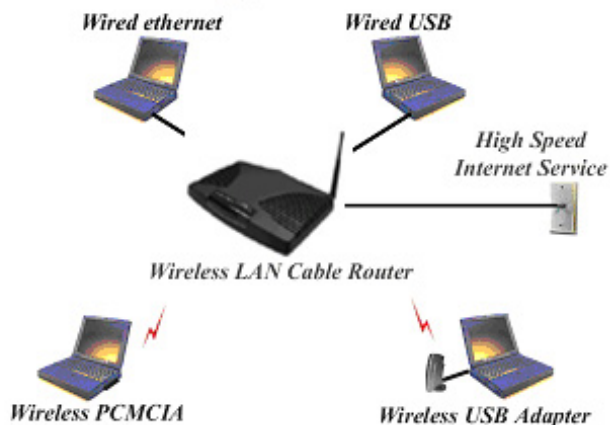
- **Simplicity** – Includes intuitive LEDs, making self-installations a snap. If utilizing USB, our WHQL certified drivers ensure compatibility with any Microsoft O/S. The in-line power supply eliminates the hassle of finding an available wall outlet.
- **Flexibility** – A simple software download upgrades the modem to DOCSIS 2.0. The wireless cable modem can be configured for just about any subscriber requirement.
- **Remote Management –** Eliminate truck rolls with Ambit's comprehensive management utilities. With remote, SNMP, telnet and webpage access, MSOs can:
  - o **Configure router** – The router contains a wealth of configuration options including NAT, firewall, parental controls, access lists, and much more.
  - o **Enable/disable ports** – Designed to allow the MSO to enable/disable interfaces in real-time based on the customer's service plan.
  - o **Access List** – Never worry about unauthorized access in a dorm or MDU environment. You control the MAC addresses that can access the wireless cable modem.
- **Protection** – Ambit includes comprehensive firewall protection and parental controls. With this, users can block specific keywords, prevent attacks, and monitor usage. In addition, the modem supports the industry standard 64 and 128-bit WEP encryption as well as Passphrase.

Ambit Wireless Cable Modem Router Features:
- DOCSIS 2.0 h/w and CableHome upgradeable
- 4-port 10/100 ethernet switch supports full/half duplex
- External antenna for greater coverage
- 802.11b and 802.11g support
- CableHome and DOCSIS 2.0 upgradeable
- Firewall and Parental Controls with email notification of violations
- 64/128 bit WEP Encryption and Passphrase support
- NAT (static or DHCP) also supports PAT
- VPN pass-through
- RADIUS authentication
- HTTP and SNMP management
- Access control list for Port, IP, and MAC address control
- Customized user levels to allow MSOs greater control of device

Ambit is a worldwide provider of broadband products. Our years of experience in providing wireless technologies to PC manufacturers along with over 2 million cable modems sold worldwide has helped Ambit create products specifically designed with the MSO in mind.

Ambit Microsystems Inc.

Application

Wired ethernet Wired USB

High Speed Internet Service

Wireless LAN Cable Router

Wireless PCMCIA Wireless USB Adapter

AMBIT®

DOCSIS

CL
CableLabs-CERTIFIED

TECHNICAL SPECIFICATION

Item	Downstream (Receiver)	Upstream (Transmitter)
Frequency Range	88MHz ~ 860MHZ	5MHz ~ 42/65MHz
Modulation	64QAM/256QAM	QPSK/16QAM
Symbol Rate	5.057/5.361/6.952 Msymbols/sec	TDMA:160, 320, 640, 1280, 2560,5120 Ksymbols/sec S-CDMA:1280, 2560,5120 Ksymbols/sec
Data Rate	30Mbits/sec (64QAM) 43Mbits/sec (256QAM)	TDMA:0.32 ~ 30.72Mbs S-CDMA:2.56 ~ 35.84 Mbs
RF Input/Output Power	-15dBmV ~ +15dBmV	+8dBmV ~ + 58dBmV(QPSK) +8dBmV ~ + 55dBmV(8QAM/16QAM) +8dBmV ~ + 54dBmV(32QAM/64QAM) +8dBmV ~ + 53dBmV(S-CDMA)
Carrier To Noise Ratio @BER<10	64QAM: 23.5dB 256QAM: 30dB	
Power Adapter	10 VDC	
Operating Temperature	0 to 40°C Celsius	
CPE Interface	4-port 10/100Base-T Ethernet Switch, Rj45 connector USB 1.0 & 1.1 Connector Type B	
RF Cable Interface	75 ohm F-type female connector	
MAC, LLC/SNAP, IP and CPE Filter	DOCSIS RFI	
Internet Protocol Stack	ARP, ICMP, IP, TCP/UDP, IGMPv2, RFC826, RFC792, RFC791, RFC768/793	
Provisioning Applications	DHCP, TFTP, ToD client, RFC2236	
SNMP Protocol	SNMP v2c, RFC2131/2132, RFC1350, RFC867, SNMP v3, RFC2571, RFC2576	
MIBs Support	RFC1905, RFC1213, RFC2011, RFC2013, RFC2669, RFC2670, RFC2233, RFC1907, RFC1493, draft - ietf i ipcdn - mcns -bpi - mib-01, Qos MIB, RFC2933, BBI + MIB, RFC2786, Ambit private	

Wireless Access Point

Operating Frequency	2400~2497MHz ISM band
Data Rate	1, 2, 5.5, 6, 9, 11, 12, 24, 36, 48 & 54 Mbps
Transmitter Power	Maximum 18 dBm
Modulation	DQPSK, DBBPSK, and CCK
Encryption	64/128bit WEP
Antenna	External

Router

DHCP	Client and server
NAT/NAPT	Network Address Translation, Network Address and Protocol Translation
Configuration	Web interface, Telnet, and SNMP
Security	Access control list for filtering, firewall, parental controls
Mode of Operation	Bridge and NAT

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