

BRG-3510

Broadband Residential Cable Modem Gateway



Key Features

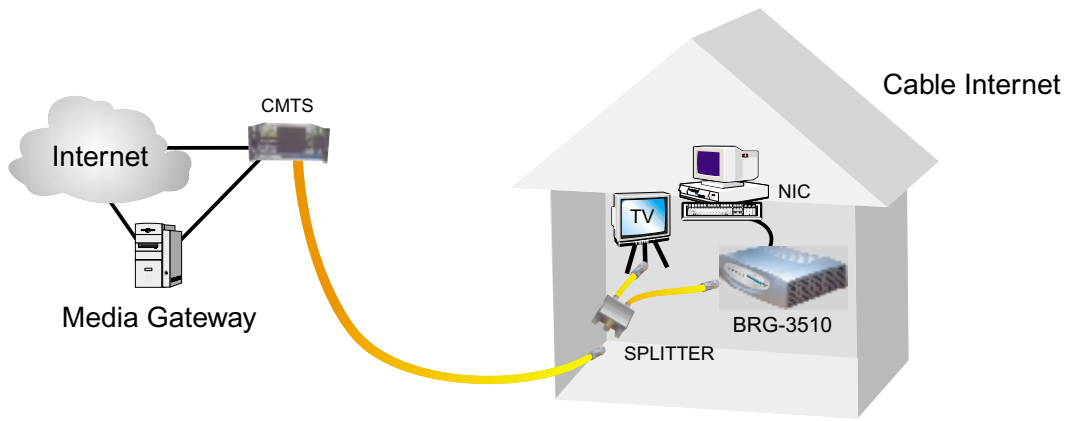
- DOCSIS 1.0-certified cable modem; DOCSIS 1.1 hardware-ready, easily software upgradeable
- RJ-45 10/100BaseT Ethernet port serves as interface for a computer or local area network
- Capable of handling downstream data transmission speeds up to 38Mbps
- Innovative, original design using Broadcom BCM3350 cable modem chip and Microtune's silicon tuner for enhanced product stability
- Extensive SNMP management support: MIB-II, Ethernet-like MIB, Bridge MIB, Cable Device MIB, Baseline privacy Interface MIB, RF Interface MIB
- OS-independent, works with all major software platforms
- IP address filtering
- Easy-to-read LED's clearly display network status and activity

Overview

Hitron's BRG3510 is an entry-level MCNS DOCSIS 1.0-certified cable modem with a 10/100BaseT Ethernet LAN interface. Designed around the Broadcom 3350 chip and Microtune's silicon tuner, the BRG3510 is a feature-rich yet economical broadband access device for home or office.

Bringing broadband access to the desktop is easy with the BRG3510. High-speed data transfers up to 38Mbps downstream and 10Mbps upstream are possible over coaxial cable. This lets cable operators offer their users wide bandwidth applications such as telecommuting, IP connectivity to small office/home office (SOHO), or high-speed residential Internet access.

Advanced features include IP address filtering to prevent unwanted traffic on the network and SNMP agents that permit remote configuration and monitoring from a management station equipped with an SNMP server. DES data encryption ensures complete privacy for the transmitted information. DHCP and TFTP clients allow the modem to automatically get its IP address and configuration data from network servers, without the intervention of either the user or installer.



Upstream (Transmitter)

Modulation	QPSK/16QAM
Symbol Rate	160,320,640,1,280 and 2,560 ksym/sec
Frequency Range	5 to 42Mhz
Band width	200, 400, 800, 1,600 and 3,200 kHz
Signal Level	8 to 55 dBmV(16QAM) 8 to 58 dBmV(QPSK)
Output impedance	75 ohms
Output Return Loss	6 dB
Channel frequency accuracy	+50ppm
Symbol rate accuracy	+50ppm
Symbol timing jitter	<0.02 of the nominal symbol duration over a 2-sec period
Reed-Solomon codes with T=1 to 10 or no FEC coding	
Arbitrarily programmable seed scrambler	
Programmable variable-length preamble	
Supports four distinct burst profiles	

Downstream (Receiver)

Modulation Type	64QAM/256QAM
Symbol Rate	5.056941(64QAM)/5.360537(256QAM)Msym/sec
Frequency Range	91 to 857MHz
Bandwidth	6MHz
Signal Level	-15 dBmV to +15 dBmV
Total input power(40-900 Mhz)	<30 dBmV
Input impedance	75 ohms
Input Return Loss	6dB
Downstream Protocol	ITU J.83-B with a subset interleave mode
CM BER performance	64QAM:<10 @Es/No of 23.5 dB or greater 256QAM:<10 @Es/No of 30 dB or greater

Network Features

MAC Protocol	MCNS/DOCSIS 1.0 Compliant MCNS/DOCSIS 1.1 upgradable (optional)
Protocol	UDP, IP, ARP, ICMP, DHCP, TFTP, SNMP, HTTP
Management	SNMP, MIB-II, Ethernet-like MIB, Bridge MIB, Cable Device MIB, Baseline privacy Interface MIB, RF Interface MIB
Security	Baseline Privacy
DA Filtering	16 unicast address and 256 multicast address filtering

Equipment Specifications

CPE Interface	RJ-45 10/100BaseT (USB Connector Optional)
Cable Interface	Female "F" type RF Connector
Power Supply	12V/1.0A
Power Consumption	8Watts
Dimensions	230mm(W) x 152mm(D) x 55mm(H)
Storage temperature	-20 to +70deg.C
Operating temperature	0 to 40deg.C
Operating humidity	10% to 90% (Non-Condensing)