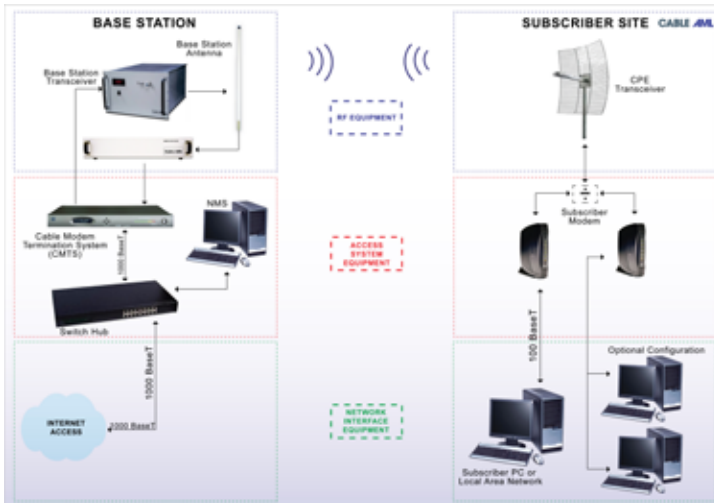


## BWA-2010 POINT TO MULTIPOINT WIRELESS SYSTEM FOR THE LICENSED 10.5 GHZ BAND

- Provides Wireless Internet Access to over 2,000 subscribers per base station
- Throughput of up to 600 Mbps
- Distance of up to 15 Kilometers
- Range can be extended to 30 Km with Repeaters
- Operates in Licensed 10.5 GHz Band
- Base Station Sectors with 90 degrees coverage available



### PRODUCT APPLICATION:

The BWA-2010 System is a high-capacity wireless Internet system designed to provide “last mile” Internet service to commercial and residential subscribers within an area of up to 15 Km radius from the base station.

The point-to-multipoint system provides a competitive alternative to wired systems such as fiber, cable or DSL.

Operating in the licensed frequency bands centered in 10.5 GHz, the system provides reliable wireless broadband multipoint connectivity to thousands of subscribers within a single cell.

Designed for professional ISPs, the BWA-2010 system is modular and available in several different configurations depending on traffic volume requirements and available bandwidth.

The system is based on the DOCSIS protocol: it incorporates standard DOCSIS Base Station CMTS (Cable Modem Termination System) and subscriber modem equipment as well as standard DOCSIS-compatible SMS (Subscriber management Software) systems.

QoS features are fully integrated within the CMTS, thus reducing the need for costly third-party QoS equipment. QoS classification is performed on up to 8,000 downstream and 8,000 upstream flows. Operators can create QoS policies and service profiles applicable to a subscriber or groups of subscribers, resulting in the ability to implement end-to-end Service Level Agreements (SLAs).

The CPEs consists of a roof-mounted antenna + RF transmitter/receiver and an indoor modem connected to the outdoor unit by conventional coaxial cable.

The system is easy to install and maintain and has all the well known advantages of the DOCSIS access system, including multiple sources of modem equipment, retro-compatibility, modularity and upgradeability.

<b>SYSTEM</b>	
Downstream Frequency Range	10,180 to 10,322 MHz
Upstream Frequency Range	10,530 to 10,672 MHz
Downstream Data Throughput	150 Mbps/sector (64 QAM)
Upstream Data Throughput	50 Mbps/sector (QPSK)
Service Cell Radius	15 Km
<b>BASE STATION</b>	
Indoor Base Station Modem Type	DOCSIS CMTS
Transceiver Downstream Output Power	Up to +23 dBm/channel
Transceiver Upstream Noise Figure	4.0 dB
Transceiver Input Frequency (Downstream Input from CMTS)	450 MHz band (6 and 8 MHz channels)
Transceiver Output Frequency (Upstream Output to CMTS)	14 to 42 MHz (DOCSIS upstream channels)
Base Station Antenna Gain	17.5 dBi (90 deg Sector)
<b>CUSTOMER PREMISES EQUIPMENT (CPE)</b>	
Indoor Modem	DOCSIS CPE Modem
Outdoor CPE Transceiver RF Input Frequency	10,180 to 10,322 MHz
Outdoor CPE Transceiver RF Output Frequency (To DOCSIS modem)	450 MHz band (6 and 8 MHz channels)
Outdoor CPE Transceiver Input Frequency (from DOCSIS modem)	12 to 42 MHz
Outdoor CPE Transceiver Output Frequency	10,530 to 10,672 MHz
Outdoor CPE Transceiver Input Noise Figure	4.0 dB
Outdoor CPE Transceiver Downstream RF/IF Gain	30 dB
Outdoor CPE Transceiver Upstream Output power	+17 dBm
CPE Antenna Gain	20 dBi
<b>MECHANICAL / ENVIRONMENTAL</b>	
Outdoor Base Station Temperature range	-20 to 55 deg C
Base Station Power	-48 V +/-5%, 1.2 Amp
CPE Transceiver Power	+15 to + 24 VDC
CPE Transceiver Temperature	-20 to +55 deg C

<sup>1</sup> Specifications subject to change without prior notice.