Quality of Service features include:
- On-demand constant bit rate (CBR) services
- Minimum CIR with fixed steps to maximum rate (Rate limiting)
- Minimum CIR with best effort to maximum rate (Rate limiting)
- Best effort services-weighted fair queuing
- Class-based weighted prioritization
- Multicast data delivery
- Four levels of IP traffic prioritization

Bandwidth allocation
- Supports both preassigned (static) traffic assignment and dynamic traffic assignment
- Idle remotes can be configured to release all network resources

Acts as a local router providing:
- Static and dynamic addressing
- DHCP server or relay
- DNS caching
- Full RIPV routing support
- Multicasts to the LAN by using IGMP
- NAT/PAT
- VLAN tagging
- Firewall support through integrated accesscontrol lists

Supports unicast and multicast IP traffic

Software and configuration updates via download from the HX Gateway

Implements dynamic, self-tuning Performance Enhancement Prey (PEP) software to accelerate the throughput performance by optimizing the TCP transmission over the satellite, delivering superior user experience and link efficiency

Bi-directional data compression

Configuration, status monitoring, and commissioning via the gateway

Embedded Web interface for local status and troubleshooting

Remote terminal management via the Hughes Unified Element Manager and SNMP agent

User-friendly LED display indicating terminal operational status

Second Package Option
- 2nd LAN port allows customers to run 2 subscriptions on the same dish and modem.
- Example: Single user with SOHO 500 on 1st port, LAN with Corporate 2000 Plus on 2nd port.
- Option to use BW Netmanager to combine 2 subscriptions into 1 LAN link.
- Reduces your shipping and installation costs.
- Options subject to bandwidth availability (maximum combined upload of 512kbps).
- Customers may also run 2 dedicated or 2 CBR packages on same modem.

Physical Interfaces
- Two 10/100BaseT Ethernet LAN RJ45 ports
- One Serial port (RS-422 or RS-232)

Satellite & Antenna Specifications
- Outbound transmission format: DVB-S or DVB-S2
- DVB-S supports adaptive coding and modulation
- Information Rate (Receive or HX System Outbound Channel): Up to 121 Mbps
- Information Rate (Transmit or HX Inbound Channel): Up to 3.2 Mbps
- Symbol Rate (Receive): 1 to 45 Msps (on 1 Mbps steps)
- Symbol Rate (Transmit): (256, 512, 1024 ksps)
- Encoding DVB-S (Receive): Convolutional with concatenated Reed Solomon; Viterbi 7/8, 5/6, 3/4, 2/3, or 1/2
- Encoding DVB-S2 (Receive): BCH with LDPC 3/5, 2/3, 3/4, 5/6, 8/9, or 9/10 (8PSK)
- Transmit encoding: Rate 1/2, 2/3, 4/5 TurboCode, Rate 1/2 Convolutional
- Frequency Range: C-, extended C-, Ku-, and Ka-band
- Modulation (Receive): QPSK or 8PSK
- Modulation (Transmit): QPSK or 8PSK
- Bit Error Rate (Receive): 10^-10 or better
- Bit Error Rate (Transmit): 10^-7 or better
- Radio: 1 and 2 watt Ku-band
- 2 watt C-band
- 1, 2, and 3.5 watt Ka-band

Mechanical & Environmental
- Weight (IDU): 4.8 lbs (2.18 kg)
- Dimensions (IDU): 11.5” W x 1.8” H x 11” D (29.21 cm W x 4.7 cm H x 27.94 cm D)
- Operating temperature: IDU: +32º F (0º C) to +104º F (+40º C)
- Input power: 90 to 264 VAC; 50 to 60 Hz
- DC power supply (optional): 12 to 24 VDC

For additional information, please contact us at sales@bentleywalker.com
Hughes, the world leader in satellite networking, has introduced the HX System, designed and optimized for small networks where the provision of high-quality and high-bandwidth links is the most important criterion. Building upon the heritage and capabilities of the more than 700,000 broadband satellite terminals shipped by Hughes, the HX System incorporates many of the advanced features pioneered by Hughes including integrated TCP acceleration and advanced IP networking features.

HX System Architecture

The HX System provides star TDM/TDMA connectivity consisting of a central gateway connecting to multiple HX remote terminals. With a DVB-S/DVB-S2 outbound carrier supporting rates up to 121 Mbps and multiple inbound carriers supporting rates up to 3.2 Mbps, the HX System provides the high throughput needed for high QoS networking.

Efficiency and flexibility in utilizing satellite bandwidth are the core of its design. Each link can be configured to provide a QoS tailored for the individual remote terminal. Each remote link can be independently configured with Minimum CIRs and Maximum Rates, thereby allowing a service provider to develop a service tailored to its customers’ specific requirements. In addition, the HX System bandwidth allocation scheme uses an Aloha channel for initial traffic requests, which means that remotes can be configured to de-allocate bandwidth based on inactivity. This frees up unused bandwidth and allows an operator to make more efficient use of space segment resources.

Because the HX System is DVB-S conformant, the HX System can easily be multiplexed to an existing DVB outbound carrier such as the Hughes HN system, DTH system, or other DVB-based broadband systems.

HX50 Broadband Terminal

High-performance satellite router

HX50 is a high-performance satellite router designed to support high-bandwidth links with Quality of Service (QoS) features such as Min/Max CIR together with dynamical location of bandwidth. With integrated IP features including NAT/PAT, DHCP, RIPV1, RIPV2, and DNS server-side functionality, together with TCP acceleration and a high-performance satellite modem, the HX50 is the ideal platform to enable high-performance IP connectivity for a variety of applications including cellular backhaul, MPLS extension services, virtual leased-line services, and other high-bandwidth solutions.

Target Markets

- SCPC/MCPC replacement links
- GSM backhaul
- MPLS extension services
- Embassy and government networks
- Private leased-line services

HX50 Indoor Unit

Service Plans Available

Service Plan | Download Speed (Headline rate) | Upload Speed (Burst rate) |
---|---|---|
HX Consumer | 300Kbps | 128Kbps |
HX Connect 500 | 512Kbps | 128Kbps |
HX SOHO 500 | 512Kbps | 128Kbps |
HX Legacy 500 | 512Kbps | 128Kbps |
HX SOHO 500 Plus | 512Kbps | 256Kbps |
HX SOHO 500 Premium | 512Kbps | 512Kbps |
HX Legacy 1000 | 1024Kbps | 256Kbps |
HX Business 1000 Plus | 1024Kbps | 256Kbps |
HX Business 1000 Premium | 1024Kbps | 512Kbps |
HX Legacy 2000 | 2048Kbps | 512Kbps |
HX Corporate 2000 Plus | 2048Kbps | 512Kbps |
HX Corporate 2000 Premium | 2048Kbps | 512Kbps |

*Maximum headline rate. Typical speeds may vary, please consult HX grade of service document for details.

Please contact sales@bentleywalker.com to discuss pricing and availability of dedicated / CBR circuits.