

Rack-mountable, High-performance satellite router

The HX100 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 dynamic allocation of bandwidth. With integrated IP features including NAT/PAT, DHCP, RIPV1, RIPV2, and DNS server/relay functionality, together with TCP acceleration and a high-performance satellite modem, the HX100 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



HX100 Indoor Unit



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 deallocate 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.

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 are the most important criteria. 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.

