

## Outdoor Satellite Router – HT2010

High-throughput, high-efficiency, future-proof and fully compliant with the industry-leading IPoS standard, HT2010 is a powerful satellite router designed to provide high-speed broadband access to users of small/medium enterprise (SME) and distributed enterprise networks.

The HT2010 router supports a wideband DVB-S2X forward channel, delivering the industry's best efficiency. The return channel uses powerful and advanced Low Density Parity Coding (LDPC) in conjunction with Adaptive In route Selection (AIS) for industry best performance. The HT2010 features best-in-class throughput performance, delivering up to 200 Mbps of throughput and the capability to support the most bandwidth-intensive and demanding applications

A full-featured IP router, HT2010 modem support a switching capacity up to 23,000 packets per second eliminating need for an external router. IP routing and addressing features implemented in the same include the RIPV2 and BGP routing protocols, virtual router redundancy protocol (VRRP) with policy, DHCP server or relay, as well as network address translation(NAT) and port address translation (PAT).

Network operations are easy to perform as the HT2010 modems features an integrated Web server supporting a Web browser for commissioning and troubleshooting. Full- featured, built-in diagnostics provide historical information about network performance or error conditions. An integrated LAN sniffer eliminates the need for onsite presence during troubleshooting. The HT2010 modems are centrally managed for software configurations and downloads.



### Adaptive LDPC Coding

The HT2010 modems incorporate an innovative adaptive LDPC coding scheme on the return channel, developed by Hughes, enabling superior Modems performance. The adaptive LDPC's ability to run with minimal link margin results in maximum bandwidth efficiency. Additionally, the HT2010 modems use of variable burst LDPC code block lengths sized to the amount of IP data to be transmitted further increases the return channel efficiency. Overall, the adaptive LDPC coding on the return channel yields more than 20 percent bandwidth efficiency improvement over competing systems.

### Features

- Outdoor Router Mounted on Antenna
- IP67-compliant design
- Adaptive LDPC coding on return channel
- MF/TDMA return channel with Aloha diversity
- DVB-S2X with Adaptive Coding and Modulation (ACM) on forwardchannel
- High-throughput satellite router
- IPv6/IPv4
- Software and configuration updates via download from the NOC
- Implements Performance Enhancement Proxy (PEP) software to accelerate throughput performance by optimizing the TCP transmission over the satellite, delivering superior user experience and link efficiency
- Implements Hughes TurboPage® software to accelerate HTTP traffic for fast browser access
- Quality of Service (QoS) features include: Inbound Quality of Service (IQoS), bi-directional DSCP, and outbound bandwidth management.
- Secure Network Transmission with bi-directional IPSEC and AES-256 encryption (optional)
- Configuration, status monitoring, and commissioning via the Network Operations Center (NOC)
- Firewall support through integrated access control lists
- Remote terminal management via the Hughes Jovian Network Management System or Unified Element Manager and SNMP monitoring
- Universal power supply supports international voltage ranges and frequencies and has a detachable power cord

### Technical Specifications

#### Physical Interfaces

Physical Interfaces: Single Gigabit Ethernet LAN RJ45 ports

#### Satellite & Antenna Specifications

##### Forward Channel

DVB-S2X with Adaptive Coding and Modulation (ACM)

Frequency: Ka-band or Ku-band

Encapsulation: GSE

Symbol rates: Up to 235 Msps

##### Return Channel

MF-TDMA

LDPC FEC with efficient burst size encapsulation

OQPSK, QPSK, 8PSK, and 16APSK modulation

AES 256 link encryption

Symbol rate from 256 kbps to 12 Msps

#### Mechanical & Environmental

Weight: 4.3Kg

Dimensions: H x 11.4cm W x 33cm L x 30.5cm

Operating Temperature: 0° C to 55° C

Input Power: -48V DC

Power Supply (Optional): 24 VDC DC

Ingress Rating: IP67

Mounting: Antenna/Wall

For sales queries, please contact [kam@hughes.in](mailto:kam@hughes.in) or [marketing@hughes.in](mailto:marketing@hughes.in)