

## HT2550 IN - Satellite Router

As part of the market-leading Hughes JUPITER™ System, the HT2550 IN is the powerful, next-generation satellite terminal featuring support for the 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 Inroute Selection (AIS) for industry-best performance. The HT2550 IN features best-in-class throughput performance, delivering up to 200 Mbps of throughput and is capable of supporting bandwidth-intensive, simultaneous multimedia applications.

The HT2550 IN is a high-performance satellite router designed to be installed in an industry standard 19" equipment rack suitable for data center environments, most enterprise facilities and carrier facilities. The compact design consumes only one rack space (1U rack mount) and supports a variety of power options. The HT2550 IN comes equipped with 2 GigE LAN ports.

The HT2550 IN supports integrated conditional access, hardware based AES-256 Encryption (bi-directional) and X.509 remote terminal authentication.

The HT2550 IN router can be used for backhauling 4G/LTE cell sites. The S1-U interface between the eNodeB and the EPC uses GPRS Tunneling Protocol (GTP) to encapsulate the user traffic. To minimize the traffic carried on the satellite link, the HT 2550 IN router strips off the GTP header information and reconstitutes it at the Gateway. The HT 2550 IN supports 7,500 simultaneous TCP connections for 4G/LTE backhaul applications.



### Technical Specifications

#### Forward Channel

- DVB-S2X with Adaptive Coding and Modulation (ACM)
- Frequency: C-band, Ku-band, and Ka-band
- Modulation: QPSK, 8PSK, 16APSK, 32APSK, 64APSK
- Encapsulation: GSE
- Symbol rates: Up to 235 Msps

#### Return Channel

- MF-TDMA, TDM (SCPC Dedicated Carrier)
- LDPC FEC with efficient variable block/burst sizes
- QPSK, 8PSK, 16APSK modulation
- Symbol rate from 256 ksps to 12 Msps (MF-TDMA)
- TDM Return Channel Symbol Rate: 1Msps to 50Msps

#### Network Interfaces

- 2 GigE LAN ports

#### Power Supply Options

- AC Input: 90-264 VAC
- DC Input: +24 V and -48 V

#### Mechanical and Environmental

- Weight: 8.2 lbs (3.72 kg)
- Size: 19" (w) x 10.5" (d) x 1.75" (h)
- Operating temperature: -0° C to +50° C

#### Other

- Radio specifications:
  - L-band – TX: 950-1825 MHz, RX: 950-2150 MHz
  - Available in C-, Ku-, or Ka-band

#### Security

- Bi-Directional AES-256 Encryption
- X.509 remote terminal authentication

#### Regulatory

- Safety: UL/CSA/EN 60950-1
- EMC: FCC Part 15 class B, ICES-003
- RoHS-2 compliant

#### Networking Features:

- |                                 |                             |
|---------------------------------|-----------------------------|
| - Dual stack IPv4/IPv6          | - VRRP                      |
| - Static and Dynamic Addressing | - Access Control List (ACL) |
| - BGP Routing Support           | - DNS Caching               |
| - Policy Based Routing          | - SIP Call Proxy            |
| - NAT/PAT                       | - Advanced Web Acceleration |
| - RIPv2, RIPNG                  | - Layer 2                   |
| - VLAN tagging                  |                             |
| - DHCP-V6 Relay                 |                             |