

## HT2524 Satellite Router

*Optimized for Cellular Backhaul and Enterprise Applications*

As a part of the JUPITER™ System family, the HT2524 is a powerful satellite router designed for Cellular Backhaul applications for 2G, 3G, 4G/LTE, and 5G networks. It is designed to accelerate 4G/LTE traffic and to support high bandwidth applications, such as IP trunking. The HT2524 features integrated GTP acceleration which can handle as many as 16,000 TCP sessions between an eNodeB and the 4G/LTE core and providing better network utilization due to the higher efficiency with typical savings of 60%.

The return channel on the HT2524 uses advanced Low Density Parity Coding (LDPC), and Adaptive Coding and Modulation (ACM) in conjunction with Adaptive Inroute Selection (AIS) for exceptional performance. With Best-in-Class throughput performance, the HT2524 delivers up to 200 Mbps of throughput and is capable of supporting bandwidth-intensive, simultaneous multimedia applications.

Designed for carrier-grade applications, the HT2524 fits the standard 19" equipment rack found in the typical data center environment, most enterprise facilities, and carrier facilities. The compact design requires only one rack space (1U rack mount) and has a variety of power options for AC or DC operation. It has a dual-cable IFL and L-band interface to the outdoor unit for operation over a wide array of frequencies using a variety of high-power BUCs. The HT2524 is equipped with 4 GigE LAN ports. Key IP features in it includes

IPV4/IPV6 with static and dynamic addressing, BGP and policy-based routing and layer 2 VLAN, MPLS and IEEE-1588 tag preservation. These provide an efficient end to end transport across the link for better interoperability with existing networks.



### 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 with ACM
- LDPC FEC with efficient variable block/burst sizes
- OQPSK, QPSK, 8PSK, and 16APSK modulation
- Multiple roll off factors from 5% to 35%
- Symbol rate from 256 kbps up to 12 Msps

#### Network Interfaces

- 4 GigE LAN ports

#### Power Supply Options

- Internal AC power supply
- AC Input Voltage Range: 90–264 VAC
- Optional: +24 VDC Power, -48 VDC Power

#### Mechanical and Environmental

- Weight: 8.2 lbs (3.72 kg)
- Size: 19" (w) x 9.87" (d) x 1.75" (h)
- Operating temperature: -0° C to +50° C
- Relative humidity: 77% (noncondensing)

#### Other

- Radio specifications:
  - L-band – TX: 950–2400 MHz, RX: 950–2150 MHz
  - Available in C-, Ku-, or Ka-band
- Antennas: 74 cm, 90 cm, 98 cm, 120 cm, or 180 cm
- IFL cable type and length: Dual RG-6, 75 ohm, F-type connector, up to 150' (50m)

#### Regulatory

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

#### Network Features:

- Dual-stack IPv4/IPv6
- Static and Dynamic Addressing
- BGP Routing Support
- Policy-based Routing
- NAT/PAT
- VLAN tagging DHCP-V6 Relay VRRP
- Access Control List (ACL)
- DNS Caching
- SIP Call Proxy
- Advanced Web Acceleration
- 4G backhaul support with GTP Acceleration and header compression
- 5G ready for interoperability with upcoming networks
- Layer 2 transport with acceleration and compression