

HN7700S-R Broadband Terrestrial Wireline and Wireless Router



High-performance broadband router provides terrestrial and wireless connectivity with integrated wide area network acceleration and optimization technology

Hughes, a leader in managed network services, has expanded the HN7000S family of high-performance broadband satellite routers with the introduction of the HN7000S-R standalone router, a single platform used to provide terrestrial and wireless connectivity. Since launching the HN7000 portfolio of satellite routers in 2005, Hughes has shipped 1.9 million terminals to customers worldwide. Hughes has leveraged that vast experience in the development of the HN7000S-R, which is designed to provide managed services across xDSL, 3G (EVDO and HSDPA), cable, and T1. The HN7700S-R router allows full management and a scalable broadband service offering, regardless of access technology used while accelerating the connection with state-of-the-art optimization and compression technology.

HN7700S-R Benefits

- Simplifies operations with a fully-managed network solution across multiple transport technologies
- Saves money on access bandwidth with integrated compression technology
- Provides higher network performance with integrated acceleration technology

HN7700S-R Features

- DHCP server/relay
- Network address translation
- Port address translation
- DSCP and multi-field classification
- RIPv2, BGP, VRRP
- Policy-based routing
- IPSec (AES) encryption
- Firewall and ACL
- Integrated dial back-up modem
- Remote software downloadable

Integrated WAN Acceleration Technology

The HN7700S-R leverages key Hughes techniques implemented to significantly accelerate the transfer of user data over the Wide Area Network (WAN). These acceleration techniques compensate for the effects of latency (delay) in order to provide optimal performance, particularly with wireless connectivity. The HN7700S-R also performs real-time (lossless) data compression on user traffic, thereby speeding transfer times and optimizing link bandwidth. All of these acceleration techniques are embedded in the router and require no reconfiguration on any connected devices, enabling users to enjoy high performance without worrying about the technical details.

The HN7700S-R supports QoS features such as policy-based routing using DSCP values as well as any combination of IP address, port, or slot number. The router is able to prioritize IP traffic ensuring that critical applications have the bandwidth required, regardless of the congestion level of the network. Other QoS features supported by the HN7700S-R include VLAN tagging, Firewall, and Access Control Lists to better manage traffic from customer Local Area Networks (LANs).

The HN7700S-R supports three modes of operation with terrestrial and wireless technologies:

- **Layer 2 and Layer 3 PPP/PPPOE:** in this mode, a transport-specific modem (such as a DSL modem) is connected to the HN7700S-R WAN port. The modem is configured in Bridge mode and the HN7700S-R uses PPP/PPPOE to connect to the NAP network.
- **Static IP:** in this mode, the HN7700S-R connects to a router or modem (which terminates the circuit) to get access to the network, such as a T1 or wireless (for example, EVDO) network. Its WAN IP address is configured manually during commissioning.
- **Dynamic IP:** this is similar to the static IP mode, except that the HN7700S-R obtains its WAN IP address dynamically from the router or modem (which terminates the circuit).



HughesNet encompasses all broadband solutions and managed services from HUGHES, for large enterprises, governments, small businesses, and consumers bridging the best of satellite and terrestrial technologies.

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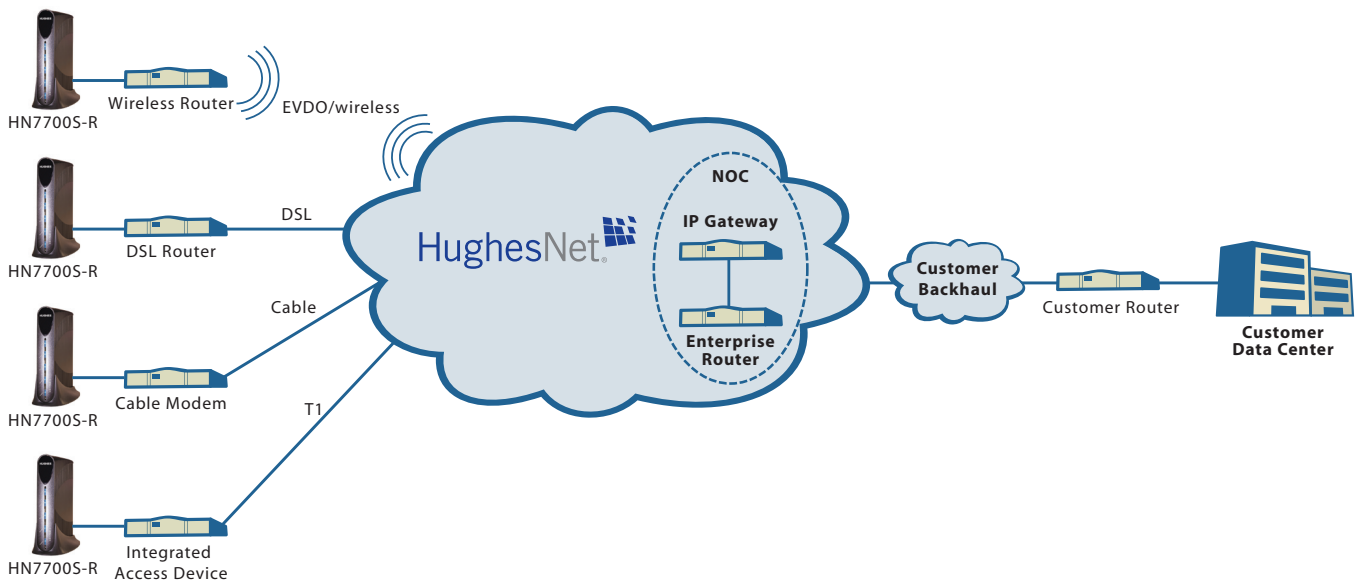
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The HN7700S-R is ideally suited for networks where a variety of transport connections are implemented including xDSL, cable, EVDO, and T1, giving enterprises several advantages including utilizing a common platform managed from a single point. In addition, enterprises obtain secure connections while gaining the benefits of acceleration and compression.

The HN7700S-R includes an integrated serial port with protocol processing to support SDLC, X.25, or XPAD (asynchronous data) protocols, thereby enabling legacy applications, such as Automatic Teller Machines or credit card processing. The HN7700S-R supports LLC2 on the LAN interface and with an integrated V.90 modem, enables dial backup capability through a public switched terrestrial network for virtually 100 percent availability.

Features

- Supports unicast and multicast IP traffic
- Software and configuration updates via download from central manager
- Implements dynamic, self-tuning Performance Enhancement Proxy (PEP) software to accelerate the throughput performance by optimizing the TCP transmission over the WAN, thereby delivering superior user experience and link efficiency
- Quality of Service features include IP traffic prioritization providing weighting based flow control and bidirectional DSCP
- Data compression
- Optional bidirectional AES encryption
- Configuration, status monitoring, and commissioning via the NOC
- Embedded Web interface for local status and troubleshooting
- Acts as a local router providing:
 - Static and dynamic addressing
 - DHCP server or relay
 - DNS caching
 - Full RIPV2 routing support
 - Multicasts to the LAN by using IGMP
 - NAT/PAT
 - VLAN tagging
 - Firewall support through integrated access control lists
- Remote terminal management via the Hughes Unified Element Manager and SNMP agent
- Universal power supply supports international voltage ranges and frequencies and has a detachable power cord
- User-friendly LED display indicating terminal operational status



For additional information, please visit enterprise.hughesnet.com

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