iNFINITI 8000 SERIES SATELLITE ROUTERS SPECIFICATIONS

Everything you need to deliver reliable, high quality broadband connectivity for the most demanding user requirements

Developed to meet the most rigorous user requirements for both mobility and security, the iNFINITI 8000 Series Satellite Routers provide fast, reliable, secure, quality of service enabled connections for Communications on the Move (COTM).

Now with the integration of the latest TDMA spread spectrum technology, along with advanced FIPS-certified*** TRANSEC security and advanced QoS functionality, the 8000 series provides a new level of IP broadband capabilities with maximum flexibility.

Greater Bandwidth Optimization and Efficiencies

- Leading spread spectrum technology enables use of ultra small (sub 1m) and phased-array antennas on aircraft, trains, maritime vessels, and land based vehicles
- Fully enabled for iDirect's Global Network Management System (NMS) and automatic beam switching technology, with geomapping, allowing for a seamless network with truly global coverage while maintaining a fixed IP address at the remote
- Increased bandwidth management flexibility with advanced QoS features (Group QoS) allowing operators to segregate bandwidth by groups of remotes and by applications

Maximum Flexibility

- Built-in options for Star, Star/Mesh, iSCPC, and MF-TDMA
- Integrated TCP and HTTP acceleration
- Supports a wide range of modulations and FECs for maximum flexibility on bandwidth optimization
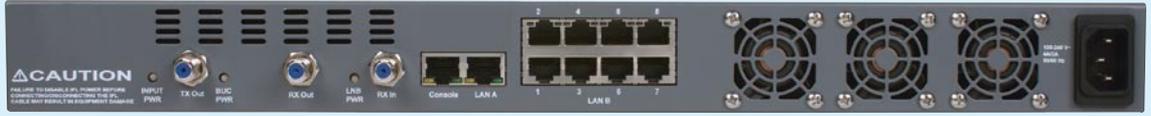
Highly Secure Communications

- Embedded AES encryption
- Advanced, high security TRANSEC with FIPS 140-2 certification***
- X.509 digital certificates encryption
- Automatic over the air key exchange

FEATURES

- Spread spectrum wave-form technology supports very small antennas
- Unique FIPS 140-2 certified*** TRANSEC security with AES encryption
- Flexible networking configurations
- Fully optimized for mobile broadband communications
- High bandwidth management flexibility with Group QoS

iDirect TECHNOLOGIES

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***Pending

iNFINITI 8000 Series
Satellite Routers
Specifications

Model 8350

Network Configuration

Network Topology	Star (MF-TDMA), iSCPC, and Mesh**
Symbol Rates SS (Spread Spectrum)	Downstream: 64 ksps up to 7.5 Msps* Upstream: 64 ksps up to 3.75 Msps*
Symbol Rates (Standard)	Downstream: 64 ksps up to 11.5 Msps Upstream: 64 ksps up to 2.875 Msps
Modulation	Downstream: BPSK (SS), BPSK, QPSK, 8PSK Upstream: BPSK (SS), BPSK, QPSK, 8PSK
Spreading Factors	Supports Spreading Factors of 2, 4, 8** and 16**
IP Data Rates (SS)	Downstream: Up to 6.5 Mbps Upstream: Up to 2.0 Mbps
IP Data Rates (Standard)	Downstream: Up to 18 Mbps Upstream: Up to 4.2 Mbps
FEC	For full list please refer to the latest iDirect Link Budget Analysis Guide
Eb/No	As low as -1.6 dB with Spread Spectrum For full list please refer to the latest iDirect Link Budget Analysis Guide
Hub Requirements	M1D1-T line card for TRANSEC or M1D1-TSS line card supporting both TRANSEC & Spread spectrum, Requires iDS 8.0 software

Interfaces

SatCom Interfaces	TxIF: Type-F, 950–1700 MHz, Composite Power +7dBm/-35dBm RxIF: Type-F, 950–1700 MHz, Composite Power -5dBm/-65dBm TVRO: Type-F, 950–1700 MHz
Available BUC Power (IFL)	+24V
Available LNB Power (IFL)	+19.5V (Nominal)
10 Mhz Reference	Software controllable on Tx and Rx IF ports
Data Interfaces	LAN: Single 10/100 and 8-Port 10/100 Switch, 802.1q VLAN RS-232: RJ45 (for GPS or Console connection or Antenna Pointing)
Protocols Supported	TCP, UDP, ICMP, IGMP, RIP Ver2, BGP**, Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, OpenAMIP, cRTP and GRE
Traffic Engineering	Group QoS, CBWFQ, Strict priority queuing
Other Features	Built-in Automatic Uplink Power, Frequency and Timing Control
Security	AES Link Encryption, TRANSEC with FIPS 140-2 certification,*** X.509 digital certificates encryption, Over the air key exchange

Mechanical/Environmental

Size	W 17.5 in x D 10.25 in x H 1.75 in (W 44.45 cm x D 26.04 cm x H 4.45 cm)
Weight	12 lbs (Including Power Supply) [5.44 Kg]
Operating Temperature	-20° to +60° C (-4° to +140° F) at Sea Level when tested in accordance with Method 501.4 Procedure II and Method 502.4 Procedure II of MIL STD 810F
Humidity	Max 92% non-condensing humidity when tested in accordance with Method 507.4 of MIL STD 810F
Input Voltage	100–250 VAC Universal Input, 47–63 Hz, 4A Max @ 100VAC, power factor correction complies with EN 61000-3-2 and EN 61000-3-3
Altitude	Operating: up to 10,000 feet (3048m); Storage: up to 30,000 feet (9144m)
Vibration	The remote will remain operational with no errors of any type when subjected to the operational vibration profile specified in Figure 514.5C-3 and the survival vibration profile specified in Figure 514.5C-2 of MIL STD 810F and tested in accordance with Method 514.5 Procedure I of MIL STD 810F.
Operational Shock	The remote will remain operational when subjected to the operational shock profile specified in Figure 516.5-8 of MIL STD 810F when tested in accordance with Method 516.5 Procedure I of MIL STD 810F.
Safety Standards	Complies with IEC 60950, EN 60950-1, UL 60950-1, CSA C22.2 No.60950-1-03
Emission Standard	Complies with EN 61000-3-2, EN 61000-3-3, EN 55022 class B, FCC Part 15 class B, CISPR 22 class B
Immunity Standard	Complies with EN 55024, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11

* Rates vary based on spreading factor
** Future release
*** Pending

6.1.2007