

iNFINITI 3000 SERIES SATELLITE ROUTER



Delivering Reliable, High-Speed IP Broadband Connectivity for Enterprise Networks

The 3000 Series Satellite Router supports reliable, two-way IP traffic ideal for high-speed enterprise networking applications including VoIP, internet access, VPN, file transfer, multicasting, and videoconferencing.

The 3000 Series is a star-topology remote satellite router designed as an easy-to-deploy solution that integrates a satellite modem, IP router, TCP acceleration, and advanced QoS and prioritization capabilities. IP over Ethernet makes it easy to integrate the iNFINITI 3000 Series into enterprise networks. The flexibility and scalability of the iDirect product line allows the Network Operator to deploy tailored topologies and configurations to support the end-customer's specific needs.

Flexibility and Scalability

The iNFINITI 3000 Series uses the high performance TDM on the outbound and deterministic MF-TDMA technology on the inbound, delivering speeds up to 18Mbps on the outbound and up to 5 Mbps on the inbound.

Superior Quality of Service and Network Availability

The extremely flexible Quality of Service and prioritization capabilities allow the Network Operator to not only prioritize traffic and applications over its networks, but with iDirect's state-of-the-art Group QoS functionalities, they can now determine traffic prioritization across multiple applications, multiple remotes, and multiple sub-networks, simultaneously adding a level of granularity that allows easy management of the most complex SLA's and subscriber services. Additionally, built-in automatic end-to-end uplink power control increases network availability and reduces downtime.

Bandwidth Efficiencies

Supporting a wide variety of the most advanced turbo product codes (TPC) FECs the 3000 Series remote offers nearly 200% more efficiency compared to traditional error correction code techniques and provides a greater flexibility for the network design and optimization. Furthermore, iDirect's built-in TCP/IP acceleration and Performance Enhancing Proxy (PEP) features enable pre-fetching of HTTP content, increase throughput performance, and maximize the user's experience and satisfaction.

Simplicity

Operating with all iDirect's hubs the 3000 Series remotes can be easily configured, monitored, and controlled through the iVantage™ Network Management System. This easy to operate and very intuitive NMS has been the industry's most renowned and robust network management system, proven and perfected for nearly a decade.

Offering more efficiency and higher data rates compared to other TDMA systems, the iNFINITI 3000 Series is an ideal enterprise networking solution for Network Operators seeking to reduce the total cost of ownership.

FEATURES

- Star topology
- High data rates 18 Mbps outbound, 5 Mbps return
- Low cost of entry
- Built-in TCP and HTTP Acceleration
- Advanced QoS and Prioritization
- MF-TDMA return channel achieving 98% payload efficiency
- Automatic End-to-End Uplink Power Control for higher network availability

iNFINITI 3000 SERIES
SATELLITE ROUTER
SPECIFICATIONS



NETWORK CONFIGURATION

Network Topology

Modulation

Maximum Rates Supported

FEC
 E_b/N_0

INTERFACES

SatCom Interfaces

Available BUC Power (IFL)

Available LNB Power (IFL)

10 MHz Reference

Data Interfaces

Protocols Supported

Traffic Engineering

Other Features

MECHANICAL/ENVIRONMENTAL

Size

Operating Temperature

Humidity

Input Voltage

Safety Standards

Emission Standard

EMC/Immunity Standard

Model 3100

Star (TDM/MF-TDMA)

Downstream: BPSK, QPSK, 8PSK
Upstream: BPSK, QPSK

Max Rate	Downstream (TDM)	Upstream (D-TDMA)
Symbol rate	Up to 11 Msps (QPSK, .793 FEC)	Up to 5 Msps (QPSK, .793 FEC, unlimited NMS)
Info rate	Up to 18 Mbps (QPSK, .793 FEC)	Up to 8 Mbps (QPSK, .793 FEC, unlimited NMS)
IP data rate	Up to 17.5 Mbps (QPSK, .793 FEC)	Up to 5 Mbps (QPSK, .793 FEC, unlimited NMS)

For more information on maximum data rates please refer to the Release Notes of iDS 8.0

For full list please refer to the latest iDirect Link Budget Analysis Guide
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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

+24V (supports BUCs up to 4W Ku-band or 5W C-band)

+19.5V (Nominal)

Software controllable on Tx and Rx IF ports

LAN: Single 10/100 Ethernet, 802.1q VLAN
RS-232: RJ45 (for GPS or Console Connection or Antenna Pointing)

TCP, UDP, ACL, ICMP, IGMP, RIP Ver2, BGP*, Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, cRTP and GRE

Group QoS, QoS (Priority Queuing and CBWFQ), Strict Priority Queuing, Application Based QoS, Minimum CIR, CIR (Static and Dynamic), Rate Limiting

Built-in Automatic Uplink Power, Frequency and Timing Control, Authentication, Antenna Control Interface (OpenAMIP)

W 11.5 in x D9.5 in x H2 in.
(W 29.2 cm x D24.1 cm x H5.1cm)

0° to +50°C (32° to +122°F) at Sea Level with temperature gradient of 5°C per 10mins
0° to +45°C (32° to +113°F) at 10000 feet (3048m) with temperature gradient of 5°C per 10mins

Max 90% non-condensing humidity

100–240 VAC Single Phase, 50–60 Hz, 2A max at 90 VAC, 1A max at 240 VAC

Complies with IEC 60950, EN 60950-1, UL 60950-1, CSA C22.2 No.60950-1-03

Complies with EN 55022 Class B, FCC Part 15 Class B, CISPR 22 Class B, EN 61000-3-2, EN 61000-3-3

Complies with EN 55024, EN 301-489-1, EN 301-489-12, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11

*Future release