X7 Satellite Router

Powerful, next-generation remote supporting DVB-S2/ACM on the outbound and ATDMA on the return, with performance capabilities for the most demanding applications. It features a compact, rack-mount design, embedded 8-port switch, a 2nd DVB-S2 demodulator, variant power supply configurations and Web iSite support making it an ideal enterprise class solution.

Network Configuration

Network Topology	Star	
	Downstream DVB-S2	**Upstream** Adaptive TDMA
Modulation	QPSK, 8PSK, 16APSK, 32APSK	BPSK, QPSK, 8PSK
FEC	LDPC, 1/4 - 8/9	2D 16-State, 1/2 - 6/7
Max. Symbol Rate	1 - 45 Msps	128 ksps - 7.5 Msps
Max. Info Rate	149.7 Mbps	19.2 Mbps
Max. IP Data Rate	59.2 Mbps	16 Mbps
Spread Spectrum (Max Rate Mcps)		Up to 7.5 Mcps Spreading Factors: 2, 4, 8

Max rates are achieved under optimal conditions.

Interfaces

SatCom Interfaces	TxIF: Type-F, 950 - 1950 MHz, Composite Power +3dBm / -35dBm Rx1/Rx2 IF: Type-F, 950 - 2150MHz, -5dBm (max) composite / -130+10*Log10(Sym rate) dBm (min) single carrier Reference Clock Out: 10/50 MHz, +/-10 ppm stability, 0 dBm -3/+4 dB power
Available BUC Power (IFL)	+24V, 118W max available @ connector +48V, 158W max available @ connector (optional)
Available LNB Power (IFL)	+19V (Nominal), 22KHz DiSEqC tone Rx1/Rx2 In: 13-18V @ 0.5A
Data Interfaces	LAN: 8-port ethernet switch, 10/100, 802.1q VLAN RS-232: RJ45 (Console connection), RS-422: RJ45 BUC I/O port (future release)
Security	AES Link Encryption (256-bit) (optional)
Protocols Supported	TCP, UDP, ACL, ICMP, IGMP, RIP Ver2, Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, OpenAMIP, cRTP and GRE
Traffic Engineering	Group QoS, QoS (Priority Queuing and CBWFQ), Strict Priority Queuing, Application Based QoS, Minimum CIR, CIR (Static and Dynamic), Rate Limiting
Other Features	Transmit Key Line*

Mechanical/ Environmental

Size	W 17.5 in (44.5 cm) x D 12 in (30.5 cm) x H 1.75 in (4.45 cm)
Weight	10 lbs (4.54 kg)
Operating Temperature	0˚ to +50˚C (32˚ to +122˚F) at Sea Level with temperature gradient of 1˚C per 1 min
Humidity	90% non-condensing humidity
Input Voltage	100–240 VAC, Auto-Ranging; ±36-76VDC (±48 VDC nominal) (optional)
Certifications	FCC, CE, TUV, and RoHS compliant

* Feature/license available in a future software release

VT iDirect, Inc. • 13861 Sunrise Valley Drive, Herndon, VA 20171 • Tel: +1 703.648.8000 +1 866.345.0983 • www.idirect.net

iDIRECT

D0000947 revB