

e150 Satellite Router Board



The e150 Satellite Router Board is ideal for sensor applications. The remote features DVB-S2/ACM and Adaptive TDMA, basic routing, VLAN functionality, QoS and optional AES encryption. It includes spread spectrum, spread factor 2 for small antenna applications and transmit keyline control for BUCs that provide power management savings.

Configuration

Network Topology	Star (DVB-S2/ACM downstream + Adaptive TDMA upstream)		
Modulation		<u>Downstream (DVB-S2)</u>	<u>Upstream (ATDMA)</u>
		QPSK, 8PSK, 16APSK, 32APSK	BPSK, QPSK, 8PSK
Maximum Rates Supported	Rate	Downstream (DVB-S2/ACM)	Upstream (ATDMA)
	Symbol rate	1-45 Msps	128 ksps - 4 Msps*
	Info rate	Up to 150 Mbps	Up to 10 Mbps*
	Remote IP data rate	Up to 76.3 Mbps	Up to 8.5 Mbps*
Spread Spectrum	Spreading Factor	2	
	Max Chip Rate	2 Mcps	
	The processing capability of an individual remote will be less than the stated maximum carrier size		
FEC	Downstream: LDPC, 1/4 - 8/9		
	Upstream: 2D 16-State, 1/2-6/7		
E_b/N₀	For full list, please refer to the latest iDirect Link Budget Analysis Guide		

Interfaces

SatCom Interfaces	TxF: Type-F, 950-1700MHz, Composite Power -30dBm to 0dBm, 1dB step size RxF: Type-F, 950-2150MHz, Composite Power -65dBm to -5dBm
Available BUC Power (IFL)	+24V, 36W max.
Available LNB Power (IFL)	+24V, 7W max., 22kHz tone
Data Interfaces	LAN: 10/100 Ethernet Web-based configuration via Ethernet port
Protocols Supported	TCP, UDP, ICMP, DHCP, Local DNS Caching, NAT/PAT*, cRTP*
Security	AES-256 Link Encryption* (optional)
Traffic Engineering	QoS (Priority Queuing, Strict Priority Queuing, WFQ); Application-based QoS; Configurable Packet Classifier; CIR (Static and Dynamic), Minimum CIR, Idle/Dormant Minimum IR
Other Features	Built-in Automatic Uplink Power Control, Frequency and Timing Control, Authentication, Remote Lock (to network), Transmit Keyline

Mechanical/Environmental

Size	4.55" x 8.035" x .85"
Weight	0.45lb
Operating Temperature	-10° to 60°C (14° to 140°F) at sea level, 0° to 45°C (32° to 113°F) at 10000 feet (3048m) without thermal management ¹
Humidity	10%-90% non-condensing humidity
Input Voltage	+24VDC
Heat Dissipation	7W
Certification	FCC, CE and RoHS compliant ²

¹ See e150 Integration Guide for thermal management guidelines

² Emissions certifications are provided by terminal integrators

* iDX 3.3.0 and above