

Compatibility	Evolution [®] and iDirect Velocity [™] compatible		
Network Topology	DVB-S2 with Adaptive TDMA Returns		
		Downstream	Upstream
		DVB-S2/ACM	Adaptive TDMA
Modulation		QPSK, 8PSK, 16APSK, 32APSK	BPSK, QPSK, 8PSK
FEC		LDPC 1/4-8/9	2D 16-State 1/2-6/7
Maximum Rates	Symbol	45 Msps	29 Msps
	Maximum downstream and upstream data rates cannot be achieved simultaneously Maximum rates are achieved with optimal configurations		
Spread Spectrum	Spreading Factor		2, 4 and 8
	Max Chip Rate		29 Mcps
Interfaces			
SatCom Interfaces	 Tx: Type-N, 950-2400 MHz, Composite Power +5dBm/-35dBm, 50Ω Rx1: TNC, 950-2150 MHz, -5dBm (max) composite / -130+10*log10 (Sym rate) dBm (min) single carrier, 50Ω Rx2: TNC, 950 - 2150 MHz, -5dBm (max) composite / -130+10*log10 (Sym rate) dBm (min) single carrier, 50Ω RX Monitor: TNC, 50Ω Software controllable 10/50 MHz reference on Tx, Rx1 and Rx2 		
Available BUC Power (IFL)	+24V, 5A max available @ connector +48V, 5A max available @ connector		
Available LNB Power (IFL)	Rx1/Rx2: 13-19V @ 0.45A, 22KHz DiSEqC tone		
Data Interfaces	LAN: 8-port switch, 10/100/1000, 802.1g VLAN, Additional 10/100/1000 port on front		
I/O	RS-232: RJ45 (Console connection), Additional console port on front, RS-232 NMEA GPS, RS-232 GPS input for antenna Control Signaling, RS-422 Keyline, RS-422 BUC control, RS-422 Filter select		
Protocols Supported	TCP, UDP, ACL, ICMP, IGMP, RIPv2, Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, OpenAMIP™, cRTP and GRE		
Security	AES FIPS 140-2 Level 3, Link Encryption (256-bit)**, TRANSEC, X.509 digital certificates authentication, Automatic Key Management		
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	Built-in Automatic Uplink Power, Frequency and Timing Control, Authentication, Antenna Control Interface (OpenAMIP) Supports Multiprotocol Encapsulation (MPE), Low-Speed COTM, Zeroize button		
Mechanical/Environmental			
Size	W 17.13 in x D 13.09 in x H 1.75 in (W 43.51 cm x D 33.25 cm x H 4.45 cm)		
Weight	11.25 lbs (5.10 kg)		
Operating Temperature	-40° to +60°C (-40° to +140°F)		
Altitude	Operational: Up to 15,000 ft (4,572m); Storage: Up to 50,000 ft (15,240m)		
Humidity	95% non-condensing humidity		
Input Voltage	100–240 VAC, 50–60Hz 36–76 VDC (with DC power supply)		
Certifications	FCC, CE, TUV, and RoHS compliant WGS** Meets MIL-STD 810G		
	*Above specs are Evolution only and software dependant. ** Applies to iDirect Velocity only and is software dependent.		

Specifications are subject to change without notice