900
Integrated Satellite Router Board
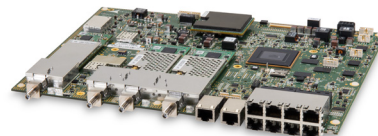
Network Configuration

Compatibility	Evolution® and iDirect Velocity™ compatible		
Network Topology	DVB-S2 with Adaptive TDMA Returns		
		Downstream	**Upstream**
		DVB-S2/ACM	A-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: SMA, 950-2400 MHz, Composite Power +3dBm/-35dBm, 50Ω
	Rx1: SMA, 950-2150 MHz, -5dBm (max) composite / -130+10*log10 (Sym rate) dBm (min) single carrier, 50Ω
	Rx2: SMA, 950-2150 MHz, -5dBm (max) composite / -130+10*log10 (Sym rate) dBm (min) single carrier, 50Ω
	Rx Monitor: SMA, 50Ω
	Software controllable 10/50 MHz reference on Tx, Rx1 and Rx2
Available BUC Power (IFL)	+24V, 2A max available @ connector
	+48V, 2A max available @ connector
Available LNB Power (IFL)	Rx1/Rx2: 13-19V @ 0.45A
Data Interfaces	LAN: 8-port switch, 10/100/1000, 802.1q VLAN
I/O	RS-232: Console
	RS-232 Serial NMEA GPS input
	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, OpenBMIP, cRTP
Security	TRANSEC module (E0002268), AES Link Encryption (256-bit)*, X.509 Digital Certificates, Automatic Key Management, CSIR**, SHIELD
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, Supports Multiprotocol Encapsulation (MPE), Low-Speed COTM, 22kHz DiSEqC tone

Mechanical/Environmental

Size	W 11.2 in x D 8.75 in x H 1.0 in (W 28.44 cm x D 22.22 cm x H 2.54 cm)
Weight	<1.7 lbs (0.77 kg)
Temperature	Operational: -40˚ to +140˚F (-40˚ to +60˚C) ; Storage: -40˚ to +176°F (-40° to +80°C)
Altitude	Operational: Up to 15,000 ft (4,572m); Storage: Up to 50,000 ft (15,240m)
Humidity	95% non-condensing humidity
Input Voltage	24VDC
Certifications	WGS Certified
	FIPS 140-2 Level 3 (#3056) - TRANSEC Module
Compliance	Designed to meet MIL-STD 810G
	RoHS

Unless otherwise specified, the information given above is for the Evolution platform and is software dependent. The activation of some features may require a license or subscription. Integrators are responsible for certifications at the terminal level. For more information, please contact your sales representative.
*Applies to iDirect Velocity only and is software dependent.
**CSIR is controlled under the jurisdiction of the International Traffic in Arms Regulations (ITAR).