

450 SDR



NETWORK CONFIGURATION

Compatibility	Evolution* compatible	
Network Topology	DVB-S2 with Adaptive TDMA Returns; multi-waveform and multi-orbit capable	
	Downstream	Upstream
	DVB-S2/ACM	A-TDMA
Modulation	QPSK, 8PSK, 16APSK, 32APSK	BPSK, QPSK, 8PSK
FEC	LDPC/BCM 1/4-8/9	2D 16-State 1/2-6/7
Maximum Rates (Symbol)	125 Msps	125 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: SMP/SSMA, 950-2450 MHz, 0dBm, 50Ω Rx: SMP/SSMA, 950-2450 MHz, -5dBm (max) composite/ -130+10*log (Sym rate) dBm (min) single carrier, 50Ω Software controllable 10/50 MHz reference on Tx
Available BUC Power (IFL)	+24 VDC nominal, 2 A max
Available LNB Power (IFL)	+13 VDC to +19 VDC, 0.45 A max
Data Interfaces	Dual 10/100/1000 Mbps Ethernet
I/O	SGMII Integrator Port, RS-232 Serial NMEA GPS input, RS-422 Keyline, RS-422 BUC control, RS-422 Filter Select
Protocols Supported	TCP, UDP, ICMP, IGMP, RIPv2, Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, OpenAMIP, OpenBMIP, cRTP
Security	TRANSEC, 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, Low-Speed COTM, 22 kHzDiSEqC tone

MECHANICAL/ENVIRONMENTAL

Size	W 3.70 in x D 6.00 in x H 1.25 in (W 9.40 cm x D 15.14 cm x H 3.18 cm)
Weight	1.22 lbs (0.55 kg)
Temperature	Operational: -40° to +140°F (-40° to +60°C); Storage: -40° to +185°F (-40° to +85°C)
Altitude	Operational: Up to 15,000 ft (4,572m); Storage: Up to 40,000 ft (12,192m)
Humidity	95% non-condensing humidity
Input Voltage	12-24VDC
Power Consumption	26W at 12V input voltage (typical at 22°C ambient temperature)
Certifications	WGS Pending, FIPS 140-3 Level 3 Pending
Compliance	Designed and tested to MIL-STD 810H for vibration, shock, temperature, humidity, and altitude, RoHS

*Specifications subject to change

Unless otherwise specified, the information given above is for the Evolution Defense 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.