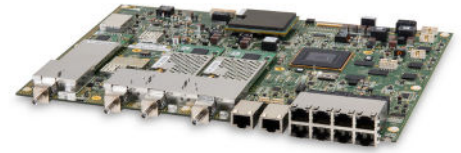


# 900 Board Satellite Modem



ST Engineering iDirect's 9-Series modems provide a superior level of IP broadband capability, supporting DVB-S2/ACM and Adaptive TDMA and are designed for high-bandwidth fixed and mobility applications. The 9-Series has enhanced performance, efficiency and security with FIPS 140-2 Level 3 certification and supports both one-way and two-way TRANSEC to enable mission-critical communications.

The 900 modem board features dual DVB-S2 demodulators for networks utilizing multiprotocol encapsulation (MPE) traffic, as well as an 8-port Gigabit switch to securely segregate user traffic. The 900 is designed to meet MIL-STD 810G when placed in a properly engineered enclosure. Optimized for integration into both fixed and mobile terminals, the 900 is a powerful board-level solution.

The 900 modem board feature set is also available in a rackmount form factor. The 9350 Modem comes in a 1RU chassis and features an LCD screen, allowing the user to view modem configuration and statistics as well as a zeroize button for added security.

## Markets

Government / Defense

### Main Features:

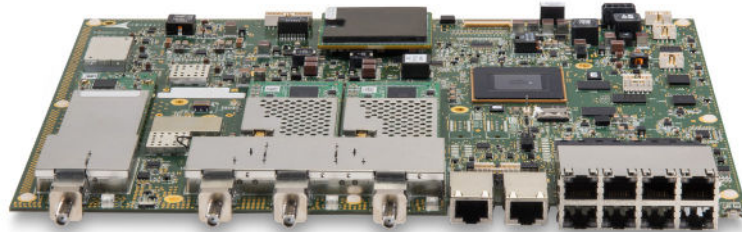
- DVB-S2 up to 45 Msps
- Adaptive TDMA up to 29 Msps
- Dual demodulators to support two data streams
- Ideal for both fixed and mobility applications
- FIPS 140-2 Level 3 Certified (#3056) TRANSEC module (E0002268)
- Extended frequency ranges for WGS constellations

EVOLUTION DEFENSE

EVOLUTION

VELOCITY





## Network Configuration\*

Network Topology	Rx1 and Rx2	Tx
	DVB-S2/ACM	Adaptive TDMA
<b>Modulation</b>	QPSK, 8PSK, 16APSK, 32APSK	SS-BPSK, BPSK, QPSK, 8PSK
<b>FEC Rates</b>	LDPC 1/4-8/9	2D 16-State 1/2-6/7
<b>Symbol Rates</b>	Up to 45 Msps	Up to 29 Msps
<b>Spread Spectrum</b>		SF: 2, 4, 8; Up to 29 Mcps

## Modem Interfaces

### Tx Interface

Connector	SMA, 50Ω
Frequency range L-band	950-2400 MHz
Tx level	Composite Power +3dBm/-35dBm
BUC power supply	+24V, 5A max +48V, 5A max
BUC reference	10 MHz and 50 MHz

### Rx1 and Rx2 Interfaces

Frequency	950-2150 MHz
Connector	SMA, 50Ω
LNB pwr supply	+13V to +19V, 0.45A
LNB LO selection	22 kHz on/off

### Data Interface

LAN: 8-port switch, 10/100/1000, 802.1q VLAN

### Management Interface

RS-232 Console, RS-232 Serial NEMA GPS Input, RS-422 Keyline, RS-422 BUC control, RS-422 Filter select

## Management

### Protocols Supported

TCP, UDP, ACL, ICMP, IGMP, RIPv2, Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, OpenAMIP™, OpenBMIP, cRTP and GRE

### Security

FIPS 140-2 Level 3 Certified (#3056) TRANSEC module (E0002268), AES Link Encryption (256-bit)\*\*, X.509 Digital Certificates, Automatic Key Management

## Mechanical and Environmental

Size	W 28.44 cm x D 22.22 cm x H 2.54 cm (W 11.2 in x D 8.75 in x H 1.0 in)
Weight	0.77 kg (<1.7 lbs)
Temperature:	
Operating	-40° to +60°C (-40° to +140°F)
Humidity:	
Operating	95% non-condensing humidity
<i>Refer to integration guide for thermal design guidelines.</i>	

## Power Supply

Input Voltage	24VDC
Power Consumption	<20 Watts without LNB and BUC <41 Watts with LNB max <170 Watts with LNB and BUC

\* Specifications are Evolution only and software dependent

\*\*Applies to Velocity only and is software dependent

