

# 9350 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 9350 Modem is housed in a 1RU rackmount chassis and features dual DVB-S2 demodulators for networks utilizing multiprotocol encapsulation (MPE) traffic. The 9350 also has one Ethernet port and an 8-port Gigabit switch to securely support different user groups. The front panel includes an LCD screen, allowing a user to view modem configuration and statistics and it also has a zeroize button for added protection. The 9350 also meets MIL-STD 810G requirements for extreme operational conditions. Coupled with the dynamic feature set of the ST Engineering iDirect platform, the 9350 is highly flexible and can support small antennas for government and military applications including command, naval, and vehicle-based terminals.

The 9350 is also available in a board-level product variant. The 900 Modem Board also features dual demodulators and an 8-port Gigabit switch and is ideal for integration into both fixed and mobile terminals.

EVOLUTION DEFENSE

EVOLUTION

VELOCITY

## 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





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

### Rx1 and Rx2 Interfaces

Frequency	950-2150 MHz
Connector	TNC, 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, Additional 10/100 port on front

### Management Interface

RS-232 Console, additional port on front panel, 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 43.51 cm x D 33.25 cm x H 4.45 cm (W 17.13 in x D 13.09 in x H 1.75 in)
Weight	5.10 kg (11.25 lbs)
Temperature:	
Operating	-40° to +60°C (-40° to +140°F)
Humidity:	
Operating	95% non-condensing humidity

## Power Supply

Input Voltage	100-240VAC, 50-60Hz 36-76VDC (with DC power supply)
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\* Specifications are Evolution only and software dependent

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