

950mp 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 950mp modem board is optimized for size, weight, and power (SWaP) with a 30% reduction than its predecessor. Lightweight and power-efficient, the 950mp is designed for integration into highly portable COTM solutions. The 950mp meets the most rigorous demands for tactical terminals delivering mobility and security, and always-on broadband capabilities into compact form factors that support data, voice, and video connectivity in highly mobile military and government applications. The 950mp has been industrialized to MIL-STD 810G requirements for extreme operational conditions. This energy efficient modem board builds off of existing transmit keyline capabilities that improve battery performance. The 950mp includes increased memory to support multiple software images for ease of upgrade.

The 950mp feature set is also available in a more robust 900 Modem Board featuring an 8-port switch and dual demodulators for networks utilizing multiprotocol encapsulation (MPE) traffic as well as in a 1RU rackmount chassis with the 9350 Modem.

Markets

Government / Defense

Main Features:

- DVB-S2 up to 45 Msps
- Adaptive TDMA up to 29 Msps
- Extremely compact and 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

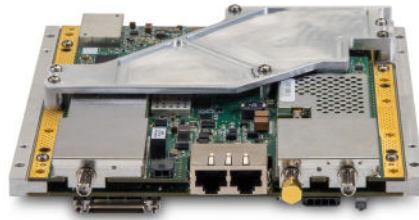
VELOCITY



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Network Configuration*

Network Topology	Rx	Tx
	DVB-S2/ACM	Adaptive TDMA
Modulation	QPSK, 8PSK, 16APSK, 32APSK	SS-BPSK, BPSK, QPSK, 8PSK
FEC Rates	LDPC 1/4-8/9	2D 16-State 1/2-6/7
Symbol Rates	Up to 45 Msps	Up to 29 Msps
Spread Spectrum		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 +5dBm/-35dBm
BUC power supply	+24V, 2A
BUC reference	10 MHz and 50 MHz

Rx Interface

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: Dual 10/100/1000 Mbps Ethernet

Management Interface

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

* Specifications are Evolution only and software dependent

**Applies to Velocity only and is software dependent



Management

Protocols Supported

TCP, UDP, 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 16.76 cm x D 17.78 cm x H 3.175 cm (W 6.6 in x D 7.0 in x H 1.25 in)

Weight 0.65 kg (1.45 lbs)

Temperature:

Operating -40° to +60°C (-40° to +140°F)

Humidity:

Operating 95% non-condensing humidity

Refer to integration guide for thermal design guidelines.

Power Supply

Input Voltage 12-24VDC

Power Consumption <20 Watts

D0000896 RevF