

SatLink 1910 High-Performance VSAT Mesh Indoor Unit



The SatLink 1910 is the leading high-performance DVB-RCS certified VSAT Indoor Unit, with support for DVB-S2 and DVB-S forward links. Hardware optimized for IP networking it offers outstanding throughput and upgrades to new hardware-based features. Advanced QoS, traffic acceleration, VPNs and many other value-added software features make the SatLink 1910 ideal for carrier-class interactive data, voice, and video conferencing, plus multicast IP applications. Users connect via Ethernet. The SatLink 1910 supports various antenna options plus BUCs/LNBs in C, Ku, Ka and EHF bands, including STM's own Ku Band transceivers.

Features & Benefits

Outstanding IP Performance

SatLink 1910 delivers 18 Mbps of IP throughput with advanced IP networking features.

Bandwidth Efficiency at Many Levels

Advanced DVB-S2 modulation and FEC, header compression, section packing & intelligent bandwidth-on-demand algorithms enable efficient broadband applications; the unit consumes only 64 bps when idle, 0 bps in "auto-sleep" mode.

Comprehensive IP Networking Features

SatLink delivers TCP and HTTP acceleration, VPN, NAT, and VLAN options, plus a built-in DHCP server and both unicast and multicast IP routing.

Advanced QoS for Data, Voice, Video

QoS Groups for bandwidth-on-demand enable delay sensitive traffic for interactive media concurrently with bulk data, without dedicating bandwidth per VSAT.

Low-Power, 1U Rack-Mount Design

The SatLink 1910's compact size with low power consumption makes it viable for all types of locations, including remote, solar-powered sites.

Accessory Card Slot for Upgrade Options

Rear plug-in card slot allows advanced new features, such as mesh networking, providing a future-proof VSAT investment.

ACM and Rain Fade Mitigation

Adaptive Coding and Modulation (ACM) on forward links and adaptive FEC and symbol rate on return links increase bandwidth efficiency and improves link margins to mitigate rain fades.

Mobile and Transportable Options

The SatLink 1910 and SatLink Hub Systems support options for marine and land mobile VSAT requirements.

BUCs up to 3 Watts with Power Control

Internal power for BUCs up to 3 Watts; automatic power control from the hub simplifies installation, and optimizes operation and bandwidth use.

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Specifications

Capacity

Throughput: Up to 12 Mbps of IP packets at 1500 bytes (varies with IP software features enabled)

IP QoS and Bandwidth-on-Demand

Traffic Classification: May use combination of 802.1p, DSCP, Protocol Type, IP Source Address, IP Destination Address, TCP/UDP Source Port or Destination Port
QoS Treatment: Seven QoS Groups with multiple priority queues for bandwidth-on-demand, plus discard group
Capacity Requests: RDBC, VDBC, AVDBC and FCA in combination, (and CRA for static assignments)

IP Packet Encapsulation & Compression

Format: (Tx & Rx) DVB-RCS standard MPEG2 MPE with section packing, without regard to packet boundaries per EN 301 192 & ISO 13818-1
Header Compression: Removes up to 23 bytes (on Tx), 21 bytes on (Rx), on each encapsulated IP packet

IP Routing and IP Stack Support

Routing: Unicast and Multicast IP
Protocols: IP, UDP, TCP, ARP, ICMP, IGMP, DHCP Server, DNS Cache, Telnet, SNMPV2c
Advanced Options: TCP Acceleration, HTTP Acceleration, NAT, GRE Tunnels, VLANs

Management Interfaces

Local: RS-232 CLI
Remote: Telnet, SNMP v2c, Web GUI
Software Upgrade: Local, TFTP or multicast via satellite

Compliance

CE: Fully compliant with R&TTE Directive
DVB-RCS: ETSI EN 301 790; SatLabs
DVB-S / S2: ETSI EN 300 421 / EN 302 307
International: Country specific certifications

Receive (DVB-S2)

Modulation: 1 to 35 Msps with choice of MODCODs:
◆ QPSK: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
◆ 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (up to 25 Msps)
◆ 16PSK: 2/3, 3/4, 5/6, 8/9, 9/10 (up to 20 Msps)
FEC Frames: Normal (64 Kbit) and Short (16 Kbit)
Roll-off Factor: 20%, 25%, or 35%
Modes: CCM, VCM, ACM
(DVB-S mode also supported for legacy networks)

TDMA Transmit (DVB-RCS)

Modulation: QPSK
Symbol Rates: 125 Ksps to 3 Msps
FEC Rates: 1/2, 2/3, 3/4, 4/5, 6/7 (Turbo Codes)
Frequency Hopping: Fast (within 500 MHz band)

Physical Interfaces

Serial Port: RS-232, DB-9 (local management)
Ethernet: 10/100Tx Mbps, RJ-45 (user IP traffic)
Tx (BUC) Interface: F-type 75 Ohm; 24 VDC at up to 3 A, plus 10 MHz reference under software control.
◆ **Tx Output:** 950 to 1450 MHz; -35 dBm to 0 dBm
◆ **BUC control:** Extended DiSEqCTM
Rx (LNB) Interface: F-type 75 Ohm; LNB Power 13 or 18 VDC, 300 mA maximum
◆ **Rx Input:** 950-2150 MHz; -65dBm to -20 dBm
◆ **LNB Control:** 22 KHz or 13/18 VDC signaling
DC Power Input: 24 VDC (from external power supply)
Front LEDs: Power, Error, Tx, Rx, Ethernet Link/Activity

Electrical, Environmental & Physical

Power Supply: 110-240 VAC, 50-60 Hz, internal
Power Consumption: 10 W (IDU only); 31 W @ P1dB with SatLink 4033 2W transceiver
Operating Temperature: 0 to 45 °C
Storage Temperature: -20 to 85 °C
Humidity: 20% to 90% non-condensing
Size: 44 x 24.5 x 4.5 cm
Weight: 4 kg