



# SatLink 1910

## High-Performance VSAT 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.

The SatLink 1910 VSAT is a member of a family of SatLink products and systems from STM enabling scalable, high-availability DVB-RCS networks optimized for Internet Protocol (IP) communications, including: VSATs, turnkey hub and gateway systems, hub components, and value-added options for advanced data, voice and video networking via satellite. STM is the technology and market leader in DVB-RCS satellite networks delivering superior performance for telecom service providers, ISPs, governments and enterprises around the world. STM also offers teleport services, installation and integration services, plus total managed network services.



## Features & Benefits

- **Outstanding IP Performance**  
SatLink 1910 delivers 18 Mbps of IP throughput with advanced IP networking features.
- **DVB-S2 and DVB-S Support on Rx**  
Forward links using DVB-S2 deliver maximum bandwidth efficiency and information rates.
- **Bandwidth Efficiency at Many Levels**  
Efficient, high-speed QPSK modulation, header compression, section packing and intelligent capacity request algorithms enable efficient high-bandwidth applications; 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**  
Bandwidth-on-demand QoS groups enable delay sensitive interactive traffic for all media and signaling concurrently with bulk data, without dedicated bandwidth per VSAT, plus application filtering.
- **Accessory Card Slot for Upgrade Options**  
Rear plug-in card slot allows advanced new features, such as mesh networking and ACM, providing a future-proof VSAT investment.
- **Adaptive Rain Fade Mitigation on Tx**  
Channels with higher link margin are selected automatically by the hub during rain fades.
- **Traffic Engineering for Large Networks**  
Carriers, ISPs and others gain control over bandwidth resources in large networks using SatLink VSAT Groups for traffic engineering. Networks with 10,000's of VSATs are supported.
- **BUCs up to 5 Watts with Power Control**  
Internal power for BUCs up to 5 Watts; automatic power control from the hub simplifies installation and optimizes operation and bandwidth use.
- **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.

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## Specifications

### Capacity

**Throughput:** Up to 18 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:** RDDBC, VDDBC, AVDDBC 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

### TDM Receive (DVB-S2 & DVB-S)

**Modulation:** QPSK (DVB-S2/S), 8PSK (DVB-S2)

**Symbol Rates:** 1 - 30 Msps (DVB-S2); 1 - 45 Msps (DVB-S)

**FEC Rates:** 1/2, 2/3, 3/4, 5/6, 7/8 (RS-Viterbi)

1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (LDPC+BCH)

**Roll-off Factor:** 20%, 25%, or 35%

### 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

### 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 DiSEqC™

**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

**Expansion Slot:** For SatLink plug-in card options

**Front LEDs:** Power, Error, Tx, Rx, Ethernet Link/Activity

### Electrical, Environmental & Physical

**Power Supply:** 110-240VAC, 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

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