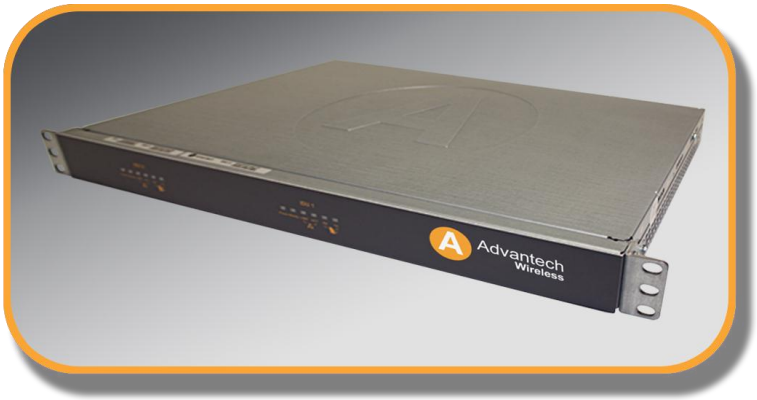
Advantech Wireless

S6520 series

DVB S2 DVB RCS DVB S

S6520 and S6520B Dual-Waveform VSAT Modems
DVB-RCS / DVB-S2



Features

- Adaptive Satellite Access Technology (A-SAT™): Provides dual-waveform transmit capability: DVB-RCS or SCPC DVB-S2 / SCPC TCC
- Available in 19 inch rackmount as well as card subassembly form (S6520B) to meet terminal integrators' needs.
- DVB-S/S2 (CCM, VCM, ACM) QPSK, 8PSK, 16 APSK and 32APSK in SCPC mode receive up to 155 Mbps (hub to remote) with Ethernet throughput up to 40 Mbps
- Up to 12 Mbps in RCS mode and 25 Mbps in DVB-S2 or SCPC TCC mode
- GUI-based control panel
- Easy-to-configure Ethernet connectivity to your PC, LAN or Router
- VPN and accelerated VPN support (optional)
- VLAN support
- GPS input port
- Automatic BUC disable for low power applications
- Simple installation
- MPLS Support

Applications

Deployable terminals, Mobile terminals, Internet/Intranet Access, Email, File Transfer, Video Conferencing, Video Streaming, Private Networking, Video-On-Demand and Distance Learning.
Enterprise and government markets

Overview

Advantech Wireless' S6520 VSAT terminals are DVB-RCS compliant. The S6520 design is an evolution of our standard DVB-RCS modems, adding greater transmit waveform flexibility, affording the end-user greater trade-off flexibility:

- optimize the use of satellite resources
- to maintain better link margins
- close links which would otherwise be marginal
- better exploit discrete compact deployable terminals

The software-defined modem adds the ability to rapidly switch from burst MF-TDMA to continuous carrier DVB-S2 transmission. This dual-waveform capability provides the user the flexibility to transition between the bandwidth-assignment flexibility of DVB-RCS and the unrivalled physical performance of DVB-S2 transmissions.

The terminal has been designed with all key IP features to fulfill the needs of an enterprise or government user. The S6520's 19-inch rack mount form factor makes it ideal for high end use or integration into transportable communication suites. The compact S6520B is provided for integration into specialized terminals, for which the dual-waveform capability allows greater deployment flexibility.

The S6520 offers powerful connectivity directly to the LAN/WAN environment or directly to a host computer. A truly corporate and government solution, it is an out-of-the-box, ready-to-go, cost-effective broadband solution for applications where waveform flexibility is provides significant operational advantages.

For high end government and enterprise use, the S6520 allows the optimized use of satellite resources. Designed to support unicast or broadcast traffic up to 155 Mbps on the forward link (hub to remote terminal), with the choice of standardized DVB-S or DVB-S2 (CCM, VCM, ACM) transmissions, and up to 25 Mbps transmission on the return link (remote terminal to hub in DVB-RCS or DVB-S2), the S6520 is ideally suited for all needs.

S6520 and S6520B Dual-Waveform VSAT Modems

Technical specifications

Network Architecture	Star
Sample Services	DVB-RCS, TCP/IP, UDP/TCP, Unicast, Multicast, Broadcast Protocols, FTP, HTTP, SNMP, ICMP, IGMP, RIP, RTP, VLAN, VPN
Quality of Service	Multiple Queues, Filtering on IP Header, QoS Groups, CRA, RBDC, VBDC, FCA
Air Interface	Receive (hub to remote): - DVB-S, DVB-S2 CCM, VCM, ACM (QPSK, 8PSK, 16APSK, 32APSK) - Encapsulation: IP over MPEG with section packing - Coding: RS/Convolutional (DVB-S) or LDPC on the receive (all DVB-S2 MODCODs supported) - Can receive entire DVB-S2 155 Mbps carrier with a maximum Ethernet throughput of 40 Mbps - Receive Rates: 1 Msymb/s — 45 Msymb/s Transmit (remote to hub, DVB-RCS waveform): - DVB-RCS QPSK, 8PSK - Encapsulation: IP over ATM, IP over MPEG with section packing - Coding: QPSK Turbo Code rates 1/2, 2/3, 3/4, 4/5, 6/7; 8PSK 1/2, 2/3, 3/4, 4/5, 6/7 - Transmit Rates: - Can transmit up to 12 Mbps (RCS) - Transmit Burst Rates: 64 Kbps – 12 Mbps in 16 Kbps increments Transmit (remote to hub, DVB-RCS waveform): - DVB-S2 CCM/ACM (QPSK, 8PSK) - Encapsulation: IP over MPEG with section packing - Coding: LDPC on the receive (all DVB-S2 MODCODs supported) - Transmit Rates: 128 Kbps to 25 Mbps
Network Interface	Ethernet 10/100 BaseT, RJ45 connectors
ODU Interface	Tx: 950-1450MHz; F-type connector RX:950-2150MHz; F-type connector
GPS Interface	RS-232 NMEA GPS input port (ideal for auto-deployable terminals)
TCP/HTTP Acceleration:	Included
Data Compression:	Included
Security	Optional IPSec (3DES or AES 256)
Network Management	SNMP-based and GUI-based management. Dual software loads. Upgrades may be downloaded over the air
BUC Size	Up to 4W Ku (5W C) with internal power supply. Higher wattage available via optional external power supply
Supply Voltage	100-240 VAC; 50Hz / 60 Hz (S6520); 24VDC (S6520B)
IDU Power Consumption	15W
IDU Operating Temperature	0ºC to +55ºC, 5% to 90% humidity, non-condensing
IDU Storage Temperature	-20C to +70C, 5% to 90% humidity
Operating Altitude	Up to 3000 m
Weight & Dimensions	6.5 kg, D31.5 cm x W43.5 cm x H4.5 cm (1RU high) (S6520)
Certifications	CE, RoHs
Frequency Combinations	Support of ODUs in C, Ku, Ka and X
Access Technology	MF-TDMA, SCPC, A-SAT™

NORTH AMERICA
USA
Tel: +1 703 659 9796
Fax: +1 703 635 2212
info.usa@advantechwireless.com

CANADA
Tel: +1 514 420 0045
Fax: +1 514 420 0073
info.canada@advantechwireless.com

EUROPE
UNITED KINGDOM
Tel: +44 1480 357 600
Fax: +44 1480 357 601
info.uk@advantechwireless.com

RUSSIA & CIS
Tel: +7 495 971 59 18
info.russia@advantechwireless.com

INDIA
Tel: +91 33 2415 5922
info.india@advantechwireless.com

SOUTH AMERICA
Tel: +1 514 420 0045
Fax: +1 514 420 0073
info.latam@advantechwireless.com

BRAZIL
Tel: +55 11 3054 5701
Fax: +55 11 3054 5701
info.brazil@advantechwireless.com

An ISO 9001 : 2008 Company

Ref.: PB-S6520-001-13155