S5920 Terminal

S5920 Ruggedized DVB-RCS VSAT Terminal

Features

- Ruggedized, Fanless, operates -40ºC to +65ºC
- DVB-S/S2 (CCM,VCM,ACM) receive up to 155 Mbps (hub to remote) with the Ethernet throughput up to 40 Mbps
- Up to 8 Mbps transmit (remote to hub)
- GUI-based control interface
- Easy-to-configure Ethernet connectivity to your PC, LAN or Router
- On-board TCP and HTTP acceleration, and compression
- Application QoS
- VoIP support
- VPN and accelerated VPN support (optional)
- VLAN support
- Easy and simple installation
- Automatic BUC disable for low power application
- Ideal for rugged environment
- Mountable on antenna kingpost
- Wide temperature range (-40°C to +65°C).
- Transportable or mobile applications

Applications

Internet/Intranet Access, Email, File Transfer, Video Conferencing, VoIP, Rural Telephony, Video Streaming, Backup Services, Private Networking, Video-On-Demand, Distance Learning, Video Surveillance and Homeland Security, SCADA, Military, Rugged Environment.

Overview

Advantech Wireless' S5920 is a complete DVB-RCS modem that is designed to be installed as an outdoor modem. It can be used in very harsh climates such as military and desert environments.
The modem accepts standard IP data on its Ethernet port. It is optimized to achieve high-performance and quick response time for professional, enterprise and governmental applications in an economical fashion. The terminal has been designed with all key IP features to fulfill all the needs of an enterprise. The attractive design and form-factor make it ideal for outdoor use in a rugged environment.

Thousands of the S5920 VSAT terminals can populate a DVB-RCS compliant network. The DVB-RCS compliance allows for other vendor's DVB-RCS qualified terminals to interoperate with the entire family of Advantech DVB-RCS terminals in the same network. This unique capability allows multiple applications to be supported on the same hub.

The S5920 offers powerful connectivity directly to the LAN/WAN environment or directly to a host computer. A truly professional solution, it is an out-of-the-box, ready-to-go, cost-effective broadband solution for SOHO, Enterprise and SCADA use in extremely hostile environments such as military operations in deserts or the low temperatures experienced in the Arctic.

For SCADA operations the modem includes a sleep mode of operation to minimize power consumption when it is not needed. From sleep mode, the modem can start transmitting data within seconds. The wakeup criteria can be as simple as a request from the hub to transmit information (hub polling) or data being received from monitor points such as motion detectors.

Designed to support unicast or broadcast traffic up to 40 Mbps on the forward link (hub to remote terminal), with the choice of standardized DVB-S2 (CCM, VCM, ACM) or DVB-S transmissions, and up to 8 Mbps transmission on the return link (remote terminal to hub) the S5920 is ideally suited for all hostile environment needs.

Technical Specifications

Network Architecture	Star
Sample Services	DVB-RCS, TCP/IP, UDP/TCP, Unicast, Multicast, Broadcast Protocols, FTP, HTTP, SNMP, ICMP, IGMP, DHCP, RIP, RTP, VLAN
Quality of Service	CRA, RBDC, VBDC, FCA
Air Interface	Receive (hub to remote): DVB-S (QPSK), DVB-S2 CCM, VCM, ACM (QPSK, 8PSK, 16APSK, 32APSK) Encapsulation: IP over MPEG with section packing Transmit (remote to hub): DVB-RCS (QPSK, 8PSK) Encapsulation: IP over ATM, IP over MPEG with section packing
Receive Coding	RS/Convolutional (DVB-S) or LDPC on the receive (all DVB-S2 MODCODs supported)
Transmit Coding	Turbocoding QPSK 1/2, 2/3, 3/4, 4/5, 6/7 8PSK 1/2, 2/3, 3/4, 4/5, 6/7
Data Rates	Can receive the entire DVB-S2 155 Mbps carrier with a maximum Ethernet throughput of 40 Mbps Can transmit up to 8 Mbps
Transmit Carrier Burst Rates	128 kbps – 8 Mbps (Tx data as small as 48 bytes)
Receive Rates	1 Msymb/s — 45 Msymb/s
Network Interface	Ethernet 10/100 BaseT, RJ45 connector
ODU Interface	Tx: 950-1450MHz; F-type connector RX:950-2150MHz; F-type connector
Security	Optional IPSec (3DES or AES 256)
Network Management	SNMP-based and GUI-based management, dual software loads, downloadable software upgrade over the air
BUC Size	Up to 8W (Advantech BUC) with internal power supply
Supply Voltage	100-240 VAC; 50 Hz / 60 Hz (with included PSU); +24VDC
Power Consumption	IDU in sleep power mode: 10W IDU+ODU, in operational state: 50W typical with 2W BUC
IDU Operating Temperature	-40^{O}C to +65^{O}C, Humidity 100% condensing
IDU Storage Temperature	-40^{O}C to +70^{O}C, Humidity 100% condensing
Operating Altitude	5,000m AMSL, adiabatically de-rated by 1^{o}C/200m from AMSL
Weight & Dimensions	6.8 kg. 15” x 9” x 3.5” (35.6 cm x 22.9cm x 8.9 cm)
Certifications	CE, FCC, RoHs, UL, CSA, Satlabs (DVB-S2 pending)
Frequency Combinations	Support of ODUs in C, Ku, Ka and X-Band
GPS Interface	Interface to GPS for transportable or mobile terminal operation

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-S5920-001-13150