

ADVENT

Satware

Embedded Computing & Routing Platform

The Vislink Satware platform is a high-performance, embedded computing and routing system. It includes a highly configurable wireless router and a quad-core Intel Atom based computing platform as an application server. The system design allows enhanced capability with simplified use of in-field broadcast equipment.

The embedded application server allows for the integration of value added performance packs. Currently available is the IP Optimization Pack, based on Xiplink technology, which adds TCP and UDP optimization for high latency/low bandwidth links such as satellite links. The IP Optimization Pack is a licensed option.

The Satware platform physically integrates into a standard Vislink half-width 1U rack chassis unit or into the body of a Vislink Mantis MSAT man-portable satellite terminal. Adding Satware to a VISLINK broadcast SATCOM solution, such as the NewSwift or Mantis system, enables multiple IP connectivity enhancements.

Out of the box, the unit provides direct access to the local network for smartphones, tablets laptops without the need for any client network configuration. A system navigation/landing page provides quick access to devices on the network.

Software packs provide the functionality for the unit. The software packs currently available are:

- The IP Optimization Pack, providing:
 - TCP/IP acceleration
 - Multi-queue QOS with traffic shaping
 - Packet aggregation, header and payload compression, allowing you to use the terminal as an efficient IP modem.

The IP Optimization Pack efficiently extends services such as VOiP/intercom and network access for connection to a newsroom computer system or other internet service to the field. Compatible with the Space Communications Protocols Specification (SCPS-TP).

Key Features

- IFB/Talkback over IP
- Bandwidth Optimization
- Quality of Service
- Asymmetric Communications

Typical Applications

- Disaster Recovery
- First-on-Scene Broadcasters
- In-Field Editors
- Emergency Services



Interfaces

Front Panel

- 1 x USB (General Purpose)
- 1 x GigE (Switched/Routed)

Rear Panel of Rack Unit

- 1 x USB (Modem Dongle)
- 1 x USB (General Purpose)
- 1 x GigE (Satellite Interface)
- 1 x GigE (WAN Interface)
- 4 x GigE (Switched/Routed)
- 4 x SMA (Wi-Fi Antenna – 2 for Access point, 2 for Client)

Software Features

- Dynamic access to network, wired & wireless
- Stateful filtering
- Source and destination NAT
- Internal connection, routing and packet marks
- Filtering by IP address and address range, port and port range, IP protocol, DSCP and many more
- Address lists

Routing

- Static routing
- Virtual Routing and Forwarding (VRF)
- Policy based routing
- Interface routing
- ECMP routing
- IPv4 dynamic routing protocols: RIP V1/V2, OSPFV2, BGP V4
- Asymmetric routing

MPLS

- DHCP Client and Server VPN
- Point to point tunnelling (OpenVPN, PPTP, PPPoE, L2TP, STP)
- Advanced PPP features (MLPPP, BCP)
- Simple tunnels (IPIP, EoIP) IPv4 support

Wi-Fi

- IEEE802.11a/b/g wireless client and access point
- Full IEEE802.11n support (2 & 5GHz)
- WEP, WPA, WPA2
- Access control list

Licensable Packages

IP Optimization Pack

- Bandwidth Optimization:
 - SCPS-TP based TCP acceleration
 - SCPS and I-PEP compliant
- Rate Control Modes:
 - Fixed Rate Control Mode
 - Dynamic Rate Control Mode
 - Programmable Rate Control
 - Basic Rate Control Mode
- Advanced Hierarchical QoS Shaping
- Streaming Data Compression
- Internet Optimization
 - Connection Fast Start & Prioritization
 - Dynamic Web Cache option
- Voice Optimizations
 - Real Time Optimizations compresses, coalesces and prioritizes real time traffic
- 4Mbps