DVB Rocket™/S-2

Cost Effective, Ultra High Speed, Fully Standards Compliant, Linux Based, Remotely Manageable, Multiprotocol, DVB-S2 Compliant IP Encapsulator. Runs From Low Data Rates to Full Transmission Range, Supporting DVB-S2 Generic Stream Encapsulation (GSE) and Base Band Framing (BBF).

Features

- Allows a smooth system upgrade to IP protocol based multimedia services
- Supports IPv4 and IPv6 packet transmission in concurrent sessions
- Provides UDP/IPv4 to UDP/IPv6 conversion
- Easy to use remote monitoring and control via secure shell access and Web interface
- PSI/SI table implementation according to MPEG-2 and DVB standards
- Input PID filtering and NULL packet cancellation
- User level access is controlled by password security
- RFC 1112, RFC 2464 for IP multicast and IPv6 multicast address mapping
- MPE/ULE section packing for enhanced packet throughput
- Base band frame packing for enhanced frame throughput
- DVB-S2 mode Generic Stream Encapsulation, Base Band Framing at more than 200 mbps
- Based on embedded Linux®

Applications

- Deliver IP video and data content over satellite
- HDTV broadcasting
- Interactive Internet services
- Video on demand

Overview

DVB S-2 is an improved specification to replace the DVB-S (Digital Video Broadcasting-Satellite) standard. It is used for transmitting high definition television (HDTV), two-way Internet over satellite, and video on demand. DVB-S2 transmission consumes up to 30 percent less bandwidth than the older DVB-S standard.

Our new **DVB Rocket/S-2** is the first DVB-S2 compliant IPv4 / IPv6 encapsulator available in the DVB satellite market. It is the latest addition to our product family of IP/DVB encapsulators. DVB Rocket/S-2 gives customers the ability to seamlessly integrate IP and other data services over DVB technology in existing DVB compliant video broadcast distribution systems. It fully implements DVB standard EN 301 192 multiprotocol encapsulation (MPE) as well as ULE, data piping, GSE (TS 102 606), base band framing (EN 302 307) and other customized transmission modes.

DVB Rocket/S-2 is based on x86 hardware and Linux® operating system software. This makes our encapsulator a very stable but also simple system. Drivers are fully embedded in the OS kernel, thus improving performance.

DVB Rocket/S-2 handles normal and short base band frames at the same time. It can provide individual base band header configurations for any of the encapsulated payload, including different MODCOD parameters.

DVEO Broadcast Division
11409 West Bernardo Court
San Diego, CA 92127
Tel: 858-613-1818 Fax: 858-613-1815
www.dveo.com

Routing Capabilities

DVB Rocket/S-2 uses IETF standard routing policies. Static routes are configured for IP-unicast packets (e.g. TCP and UDP user traffic) and for IP-multicast (UDP) traffic. The IP/DVB-S2 switch completes the routing information with the MPEG-2 transport stream packet identifier (PID) and receiver's Ethernet MAC address information.

In standard DVB-S mode the encapsulator accepts incoming packets according to its switching table and forwards packets after adding appropriate section information (header and trailer) and MPEG-2 transport headers to a connected DVB compliant modulator or multiplexer via the ASI interface.

In DVB-S2 mode the unit encapsulates IP packets in either the GSE or TS format and builds appropriate DVB-S2 compliant base band frames, which are sent either via the Ethernet output – as normal or Jumbo frames – or ASI output interface (option).

Specifications

Input and Output Ports

- Two one-Gigabit input ports/output ports
- One optional ASI input port
- One optional ASI output port

PSI and SI Tables

- MPEG-2 program specific information: PAT, CAT, PMT
- DVB service information: NIT, SDT, BAT, TDT, EIT, TOT, INT, RST

Hardware and Software

- 1 RU 19" chassis
- Linux® operating system
- Web based management

GUIs

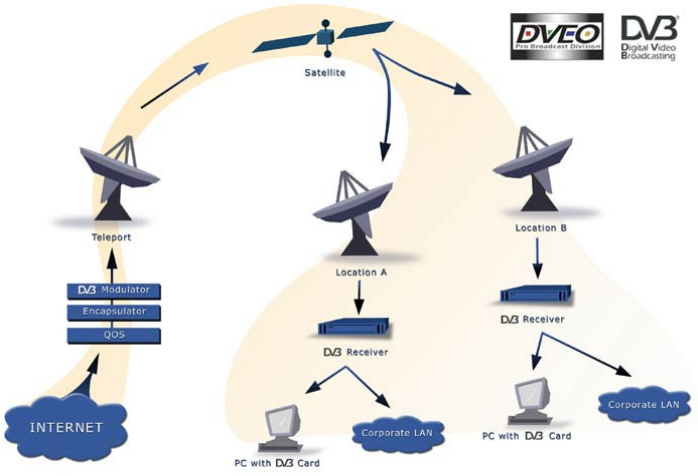
Main Screen

List Channel Entries

Add Table Entry

Rear View

Block Diagram



Ordering Information

DVB Rocket/S-2
DVB Rocket/S-2 with optional ASI input port
DVB Rocket/S-2 with optional ASI output port

DVEO Broadcast Division
11409 West Bernardo Court
San Diego, CA 92127
Tel: 858-613-1818 Fax: 858-613-1815
www.dveo.com