



LYNX IRD5200

DVB-S2 Receiver with H.264 / MPEG2 Decoding



LYNX DVB-S2 Satcom and ENG IRD

Overview

The Vislink LYNX IRD5200 is the highest performing feature-rich SD/HD Contribution IRD available for lightweight SNG Flyaway or Terrestrial ENG receive applications. Utilising Vislink's core technologies the LYNX IRD5200 combines leading edge high order DVB-S2 demodulation with highly configurable FPGA circuitry providing an abundance of user selectable features all in one streamlined 19" x 1RU Half-Rack Width unit. This revolutionary concept for SNG /ENG and OB receive operations reduces the complexities and operating costs of today's economically challenged businesses.

The LYNX5200 IRD accepts up to two L band and one 58-860MHz RF input, in addition to two individual ASI inputs, RF signal inputs, providing reliable and comprehensive coverage for any SNG or ENG/OB receiving site. The integral demodulator can be configured for DVB-S QPSK and DVB-S2 schemes from QPSK through to 32APSK

In addition, with the relevant software license, the LYNX IRD5200 will accept ASI over IP input (decapsulating an ASI video from an IP transport stream and can encapsulate up to two ASI videos into an IP stream for routing to an alternate destination for decoding.

With the relevant license the integral decoder will decode MPEG2 SD/HD 4:2:0 and 4:2:2 video (including Vislink's ultra low delay encoding) in addition to H.264 4:2:0 SD/HD and 4:2:2 10bit HD video.

A powerful, yet simple to operate, web-based graphical user interface (GUI) provides complete remote control and monitoring for the receiver by means of an integrated Ethernet/SNMP (RJ45) interface. This can be operated by connecting the LYNX IRD to a laptop or other device where the control screen will function in most web browsers. This further reduces capital equipment expenditures by eliminating the need for expensive third party remote control systems.

The Vislink LYNX series is a complete suite of units aimed at high quality or versatile contribution links where live video or content is required to be routed back to base via Satellite, Microwave or IP connectivity. The range includes HD and SD Video Encoders, DVB-S, DVB-S2, DVB-T and LMS-T Modulators, IP Satellite Modems, Diversity Receivers, IRDs and associated units. All LYNX units utilise the versatile Vislink 19"x1RU half rack width housing for compactness and extremely light weight. This packaging has proved its worth in the portable applications where these type of units are typically deployed.

Features

- 2 x L-band input with L-band loop-through monitor
 - 1 x VHF/UHF* and 1 x ASI inputs
 - ASI decapsulation from IP input*
 - ASI encapsulation onto IP output*
 - LNB/Downconverter powering
 - L3025 Downconverter powering via VHF/UHF input
 - DVB-S QPSK demodulation
 - DVB-S2 QPSK, 8PSK, 16APSK & 32APSK demodulation*
 - ASI Output
 - BISS 1/E Descrambling,
 - MPEG-2 4:2:0 & 4:2:2 SD generic and ultra low delay decoding (with Vislink Encoder)
 - MPEG-2 4:2:0 & 4:2:2 HD generic and ultra low delay decoding* (with Vislink Encoder)
 - H.264 4:2:0 Main Profile and High-profile SD and HD Decoding*
 - H.264 4:2:2 8,9 & 10-bit High-profile SD & HD decoding*
 - Web browser and SNMP control,
 - SDI-HD/SD and CVBS outputs with embedding of up to 4 pairs of decoded audios
 - Independent output of Audio Pairs #1 and #2 as analog audio or balanced AES on LEMO connector (XLR breakout lead supplied)
 - Field upgradeable via USB
 - Typical uses include:
 - ◇ Lightweight Monitoring IRD for SNG applications
 - ◇ Satcom Contribution or Cable-Head Receiver
 - ◇ ENG Point-to-Point DVB-S2 Receiver using L3025 Downconverter
- (* optional license key upgrade)

Specifications

Demodulator:

DVB-S

- QPSK

DVB-S2

- QPSK / 8PSK / 16APSK / 32APSK

L Band Input Range

- 950-2150MHz

VHF/UHF input range

- 58-860MHz

Symbol Rate

- Up to 45Msymbols

Decoder:

SD

- MPEG-2 4:2:0 & 4:2:2

HD

- MPEG2 4:2:0 & 4:2:2
- Low delay MPEG-2, 4:2:0 & 4:2:2
- H.264 4:2:0 MP, 8-bit
- H.264 4:2:2 HP, 8-bit
- H.264 4:2:2 HP, 10-bit

Audio

- 4 pairs Audio MPEG-2 Layer 1 & 2,

Descrambling:

- BISS-1 & E
- AES 128 & 256bit (future software upgrade)

Inputs:

- 2 x L band RF inputs - F-Type(f). Switchable LNB power
- 1 x UHF inputs, 58-860MHz – BNC(f). Switchable Downconverter power
- 1 x ASI input – BNC(f) (ISO/IEC 13818-2 188 bytes),
- 10/100/1000 Ethernet connection for Video-over-IP connections - RJ45
- 10/100 Ethernet connection for IP-based unit control – RJ45
- USB2 connector for code updates and profile transfers,

Outputs

- SDI-SD/HD/Composite Video – BNC(f)
- ASI output – BNC(f) (ISO/IEC 13818-2 188 bytes),
- L band Loopthrough – BNC(f)
- Audio Pairs #1 and #2 (analog or AES) – LEMO 4 x XLR3P breakout lead

Environmental & Physical

Temperature Operational

- 0°C to +50°C (32°F to 122°F)

Temperature Storage

- -20°C to +70°C (-4°F to 158°F)

Size

- 210mm wide x 350mm deep (8.27" wide x 13.78" deep)
- 1U half rack width

Weight

- 1.5 Kg (3.5lbs)

Power

- Frequency
- 47 to 63 Hz @ <100W

Operating Voltage

- 100 to 240 Vac +/- 10%

Power

- IEC Input
- 100-240VAC ±10%, 47-63Hz <100W

LYNX IRD5200 Base Configuration

- Base Unit Part Number: 9002965
- 2 x L band Inputs and 1 x L band loopthrough
- 2 x ASI inputs
- 1 x ASI output
- DVB-S QPSK Demodulation 950-2150MHz
- MPEG2 SD 4:2:0 and 4:2:2 Generic and Vislink Low Delay Decoding
- Integral web browser control
- SDI-SD and CVBS Video outputs
- 2-pair audio decoding (with upgrade to 4-pair decoding when available)

LYNX IRD5200 License Key Upgrades

| | |
|----------|--------------------------------------|
| 9002230 | 58-860MHz input enable |
| L9556 | ASI over IP Encapsulation |
| L9557 | ASI over IP Decapsulation |
| L9565 | MPEG2 HD (Generic) upgrade |
| L9564 | MPEG2 HD (Ultra Low delay) upgrade |
| L9560 | H.264 4:2:0 MP & HP SD/HD Decoding |
| L9561 | H.264 4:2:2 10-bit HP SD/HD Decoding |
| 060-5858 | DVB-S2 QPSK/8PSK Upgrade |
| 9000415 | DVB-S2 16APSK/32APSK Upgrade |



LYNX IRD5200 in AFC5003 Half Width Lightweight Flightcase with LYNX 5100 Exciter and AUC5814 BUC

