

Quantum Receiver

IP-Native Wireless Camera Receiver

The Vislink Quantum wireless camera receiver provides high reliability reception from wireless camera transmitters and takes live video production into new and more efficient workflows by putting IP connectivity at its heart.

Through multi-input diversity capability, delivering high quality LMS-T and DVB-T demodulation the Quantum receiver delivers reliable RF reception and coverage for wide area wireless production – allowing complete freedom to roam for camera operators. Through ultra-efficient HEVC video decoding support the Vislink Quantum receiver provides highest quality UHD 4k video decoding as well as multi-service HD decode support – Including HDR capability.

Vislink's Quantum receiver is designed with IP connectivity at its heart - Enabling production teams to fully implement remote production systems over IP fibre networks or the unmanaged internet thereby increasing production efficiencies, allowing event operations teams to make better use of their staff and resources.



Key Features

- Diversity LMS-T and DVB-T reception with up to 16x RF inputs
- 4K UHD and HD decoding with HDR support
- HEVC and MPEG-4 video decode compression technology
- Dual service HEVC HD Decode
- IP transport stream input and output with SMPTE 2022-2 and SRT support

Typical Applications

- Live Event on-site coverage
- Remote production Event coverage





RF Parameters

RF Inputs

- 4x RF inputs implementing MRC Diversity reception per demod card
- Up to 4x demod cards per unit
- Packet switching diversity between demod cards

Frequency Band

- 100MHz -1000MHz**Use in conjunction with the L3025-series down converters.

FEC

- 1/2, 2/3, 3/4, 5/6, 7/8

Guard Interval

- 1/32, 1/16, 1/8, 1/4

Frequency Selection

- Up to 16 pre-set channels, or tuning in 1MHz steps via front panel control

Demodulation

- DVB-T
- LMS-T

Demodulation Modes

- QPSK, 16QAM, 64QAM

Bandwidth

- DVB-T bandwidths of 6/7/8 MHz
- LMS-T bandwidths of 3/4/5/6/7/8/10/12/14/16/20 or 24 MHz with dual pedestal

Receiver Threshold

- Receiver threshold: -92dBm to BER 10⁻⁵ (nom. QPSK)

IP Transport Stream

Processing

IP Inputs

- RTP/UDP IP input
- Up to 100Mbit/s
- SMPTE2022-2 ProMPEG FEC
- SRT

IP Outputs

- RTP/UDP IP input
- Up to 100Mbit/s
- SMPTE2022-2 ProMPEG FEC
- SRT

Video & Audio Parameters

Video Encoder Profiles

- HEVC (H.265) UHD & HD:
- Profile: Main 4:2:2 10 @ L5.1
- Sampling: 8bit & 10bit
- Video rate: 1.0-40Mbps
- Video format: up to 2160p 60
- MPEG-4 AVC (H.264) HD:
- Profile: 422HP @ L4.2
- Sampling: 8bit & 10bit
- Video rate: 1.0-40Mbps
- Video format: up to 1080p 60

Video Outputs

- 3G-SDI SMPTE-424M (UHD)
- HD-SDI SMPTE-424M (HD)
- 6G-SDI SMPTE-2081
- 12G-SDI SMPTE-2082

Video Formats

- 480i @ 29.97
- 576i @ 25
- 720p @ 50, 59.94 & 60
- 1080i @ 50, 59.94 & 60
- 1080p @ 23.98, 24, 25, 29.97, 30, 50, 59.94 & 60
- 2160p @ 23.98, 24, 25, 29.97, 30, 50, 59.94 & 60

Audio Decoder Profiles

- AAC** (AAC-LC & HE-AAC)
- MPEG-1 (Layer 1 & Layer 2)
- Linear PCM Passthrough

Audio Outputs

- Digital:
- Up to 4x stereo pair Embedded audio over SDI
- Analogue:
- 2x stereo pair
- Framelock :
- CVBS Black & Burst
- Tri-level sync

Latency

- Single frame latency*
- *In combination with Vislink HCAM transmitter in HEVC mode and in combination with Vislink L1700 & Clip On-4 transmitters

De-scrambling

- Biss-1, Biss-E, AES-128, AES-256, Bcrypt-128, Bcrypt-256

Dual Decode (HEVC Only)

- BISS-1
- BISS-E Injected
- BISS-E Buried ID

Connectors

- Main Video Output
- 2x SFP cages supporting:
- 4x 3G SDI out
- 2x 6G SDI out
- 1x 12G SDI out
- Monitor Video Output
- 2x SFP cages supporting:
- 4x 3G SDI out
- 2x 6G SDI out
- 1x 12G SDI out
- 1x ASI Input Connector:
- 75 Ω BNC (F)
- GenLock Connector:
- 75 Ω Micro BNC (F)
- 1x ASI Output Connector:
- 75 Ω Micro BNC (F)
- Audio Connectors:
- 2x 5-Pin Lemo
- 1x Stereo pair per connector
- FocalPoint ODU Tx Head**:
- 6-Pin LEMO Socket
- 2x 15-way HD D-Type
- Return data
- RS232/RS485/TTL
- OCP**
- Sony/Grass Valley/OCP5
- Tally**
- Red/Green Wet/Dry
- Ethernet Transport Stream & Control Connectors:
- 1 x WAN port
- RJ45 10/100/1000
- 3 x LAN port (2 with 802.3at Type 2 "PoE+)**
- RJ45 10/100/1000

Flexibility & Power Supply

Power

- 100 – 240VAC; Up to 230W (approximate, depending on configuration)

Physical & Environmental

- Size & Weight:
- 44 mm (H) x 430 mm (W) x 368 mm (L)
- (1.7" (H) x 17" (W) x 14.5" (L))

**Check Availability

User Interface

- Touchscreen and push-wheel controlled front panel control and monitoring

Environmental

- Operating Temperature:
- 0°C to 50°C
- (32°F to 122°F)
- Humidity:
- 95% long term

Remote Control

- Comprehensive remote control and monitoring via Ethernet web browser interface

Software Upgrade

- Unit upgrades via web interface