

MDR-Series

Portable Diversity Receive System

The Vislink MDR receiver provides a flexible, wide-area diversity receive solution to ensure robust RF receive and bit-rate efficient video decode for channel-dense applications.

As a plug-and-play system with multiple inputs the MDR can be scaled to provide diversity DVB-T, LMS-T or ISDB-T RF reception to suit the size of the event.

With a consumer desire for increasingly content-rich productions, the MDR enables the use of more wireless camera feeds through bit-rate efficient HEVC video decode capability. By utilizing the latest HEVC decode technology the MDR can support high quality HD, HDR and 4k productions that bring the viewer to the heart of the action.



Key Features

- Equipped for 1 to 14 receivers according to customers' requirements, with plug and play upgrade
- Capability to support MPEG-4 and highly efficient HEVC compression standards
- Available with the choice of COFDM DVB-T, LMST or ISDB-T demodulation (with Time Interleaving FEC)
- The multi-channel system only occupies 3U rack space
- Comprehensive control and signal monitoring is provided by PC GUI via TCP/IP interface

Typical Applications

- Event Coverage
- Sports Coverage
- Airborne Operations
- Maritime Reconnaissance



datasheet

at the heart of the action

RF Parameters

Frequency Bands

- 1.3 - 7GHz band
- (other frequency bands available on special order)

Tuning Range

- 400MHz standard bandwidth

Frequency Selection

- Via IP PC based remote control

Receiver Noise Factor

- 3dB (nom.)

Receive Antenna

- Compatible with all Vislink antennas including integral LNB

Demodulator Cards

- COFDM DVB-T 2k
- LMS-T
- ISDB-T with Time Interleaving (option)

Demodulation modes

- QPSK, 16QAM, 64QAM
- FEC:
 - 1/2, 2/3, 3/4, 5/6, 7/8
- Guard interval:
 - 1/32, 1/16, 1/8 and 1/4

Noise Figure and Receiver

- Threshold:
 - -92dBm to BER 10⁻⁵ (nom, QPSK)
- Data Rate:
 - 4.98 to 31.7Mbit/s

Bandwidth

- DVB-T:
 - 6, 7, 8MHz
- ISDB-T:
 - 6, 7MHz
- LMS-T:
 - 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 MHz

IF Frequencies

- 1st IF in the range
- 450-850 DVB-T & LMS-T
- 470-850 ISDB-T

Video & Audio Parameters

Decoding

HEVC

- 2x HD decode per module
- 1x UHD decode per module
- Profile: Main 4:2:2 10 @ L5.1
- Sampling: 8bit & 10bit
- Video rate: 1.0-40Mbps
- Video format: up to 2160p 60
- Single frame decode latency
 - In combination with Vislink HCAM transmitter

MPEG-4 HD

- 1x HD decode per module
- Profile: 422HP @ L4.2
- Sampling: 8bit & 10bit
- Video rate: 1.0-40Mbps
- Video format: up to 1080p 60

Video Output

- 3G-SDI SMPTE-424M (UHD)
- HD-SDI SMPTE-424M (HD)
- HD-SDI monitoring output for HD video decode modes

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

- Up to 4x stereo pair Embedded audio over SDI
- Analogue audio out
- Digital audio out

Genlock

- CVBS Black & Burst
- Tri-level sync Latency

Data Output

- Auxiliary user data serial

IP Outputs**

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

**Check Availability

Latency

- Dependant on associated TX encoding configuration

Flexibility

Monitoring (Rx Control)

- Comprehensive remote control and monitoring via:
 - TCP/IP interface
 - COFDM demodulator / MPEG 2 decoder parameters RF
- Received signal level, C/N, MER, BER, PER
- C/N, MER, BER (dB and bar graph)

Antenna to RX Separation

- Up to 50m UHF coax cable, or with Fibre Optic interfaces for extended distances.

Power Supply

- Universal supply accepts:
 - 95 - 130VAC and 190260VAC

Physical Environment

Size

- Multi-channel unit:
 - 3RU rack mount

Weight

- Multi-channel unit:
 - 9kg (nominal depending on module count)

Environmental

- To spec:
 - -10° to +45°C
- Altitude:
 - 4500m
- Humidity:
 - 95% long term