

The new UDR-104 Fiber receiver performs DVB-T2, DVB-T and ISDB-T demodulations. DVB-T2 modulation outperforms DVB-T modulation and offers a much higher data rate, and therefore, a higher quality signal or much more robust signal than DVB-T, enabling longer and more complex links.

This receiver has two dual channels of optical fiber in DVB-T2, DVB-T and ISDB-T demodulations, using spatial diversity based on MRC technique (Maximum Ratio Combining) . It features HEVC, H.264 and Mpeg-2 encoding for 12G, high definition (HD) and standard definition (SD) signals with ultra-low latency. HEVC allows the same video quality, reducing file sizes by up to 50% compared to its predecessor, the H.264. Among the improvements of this new receiver is the ability to receive one 4K UHD signal with HDR at 10-bit 4:2:2 quality or 4 simultaneous 1080p50/59HD signals. This receiver has an integrated camera control system compatible with Sony and Panasonic.

This new generation receivers have several outputs: 12G, 3G, HD/SD-SDI, Transport Stream over IP and SFP optical output. User data or GPS data can be received over the data channel. ASI input and Transport Stream over IP input enable its use as a standalone decoder. Besides, the ASI output and the Transport Stream over IP output enable the user to handle the receiver as a demodulator.

Their easy control, operation and monitoring make our receivers very manageable. All interfaces are user-friendly: the front panel and display, serial commands and web-browser.

ACCESSORIES



DC FIBER



FEATURES

- MRC Diversity 4.
- RF over fibre.
- Transmission of true 4K UHD signals with HDR at 10-bit 4:2:2 quality.
- H.265, H.264 or Mpeg-2 decoder covering.
- End-end delay of 60ms (70ms in 4K).
- Power supply: 11 - 36 VDC and 100 - 240 VAC.
- Wireless Camera Control, Tally and Intercom.

OPTIONS

- Transport Stream over IP with FEC.
- AES-128 and AES-256 encryption.
- Integrated autotracking antenna controlled by GPS and Compass.
- Quad Mode

APPLICATIONS

- Fixed receiver in central receiver points.
- Wireless camera links.
- Portable receiver.
- High-performance decoder.

CHARACTERISTICS

RF STAGE DVB-T2, DVB-T AND ISDB-T

Frequency range:	1.3 to 11 GHz.
Tuning Step:	10 kHz.
Input level range:	DVB-T2 @ 2 GHz: -20 to -102 dBm. DVB-T2 @ 5 GHz: -20 to -101 dBm.
Diversity:	4 inputs UDR-104. 8 inputs UDR-108.
Diversity Technique:	MRC (Maximum Ratio Combining).
IF Input connector:	4 x SMA Female. 2 x Lemo FXW.3K SMPTE Optical Fiber.

DEMODULATION

DVB-T2:	COFDM 1k, 2k, 4k mode. QPSK, 16QAM, 64QAM, 256QAM. Constellation rotation. LDPC FEC: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6. IG: 1/4, 19/128, 1/8, 19/256, 1/16. Bandwidth: 1.7, 5, 6, 7, 8 MHz. Max bitrate: 46.4 Mbps.
DVB-T:	COFDM 2k mode. QPSK, 16QAM, 64QAM. FEC: 1/2, 2/3, 3/4, 5/6, 7/8. IG: 1/4, 1/8, 1/16, 1/32. Bandwidth: 5, 6, 7, 8 MHz. Max bitrate: 31.67 Mbps.
ISDB-T:	COFDM 2K, 4K and 8K mode. QPSK, 16QAM, 64QAM. FEC: 1/2, 2/3, 3/4, 5/6, 7/8. IG: 1/4, 1/8, 1/16, 1/32. Bandwidth: 6, 7, 8 MHz. Max bitrate: 31 Mbps.

DECODER

Modes:	HEVC, H.264 and Mpeg-2.
Audio decoder:	MPEG-1 Layer 1, MPEG-1 Layer 2 and AAC-LC.
Latency Encoder +:	UHD 59p = 66ms.
Decoder:	UHD 50p = 75ms. FHD 59p = 55ms. FHD 50p = 70ms. FHD 59i = 83ms. FHD 50i = 98ms.

VIDEO

Outputs:	1 x 12G-SDI. 4 x 3G-SDI, HD-SDI and SD-SDI (optional). 1 x SFP 12G Optical interface.
Formats:	2160p – 23.98/24/25/29.97/30/50/59.94 /60 Hz. 1080p – 23.98/24/25/29.97/30/50/59.94/60 Hz. 1080i – 50/59.94/60 Hz. 720p – 23.98/24/25/29.97/30/50/59.94/60 Hz. 576i – 50 Hz. 480i – 59.94 Hz.
Profile:	4.2.2/4.2.0, 8/10-bit.
Genlock:	Tri Level Composite.

AUDIO

Channel Quantity:	SDI Embedded 16 channels (8 pairs). Analogue 2 pair Line level.
Outputs:	SDI Embedded. Analogue.

DATA CHANNELS

Data channel:	User data / GPS data.
Data rate:	1,200 to 57,600 bps.

ASI & IP

Outputs and Inputs:	ASI Transport Stream. Transport Stream over IP (Optional).
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DECRYPTION

BISS:	BISS-1 and BISS-E.
AES (Optional):	AES-128 and AES-256.

CONTROL & MONITORIZATION

Control interfaces:	Front panel and display. Web server.
Monitoring:	Decoder parameters. Demodulation parameters. Frequency and input level. MER, BER, C/N. Alarms, warnings, logbook and clock.
Video:	TFT Video screen 5".

AUTOTRACKING (OPTIONAL)

Antenna control:	Local GPS, Remote GPS, Compass and Inclinometer. Control of QPT positioner.
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POWER SUPPLY

AC input:	100 to 240 V.
DC input:	9 to 36 V.

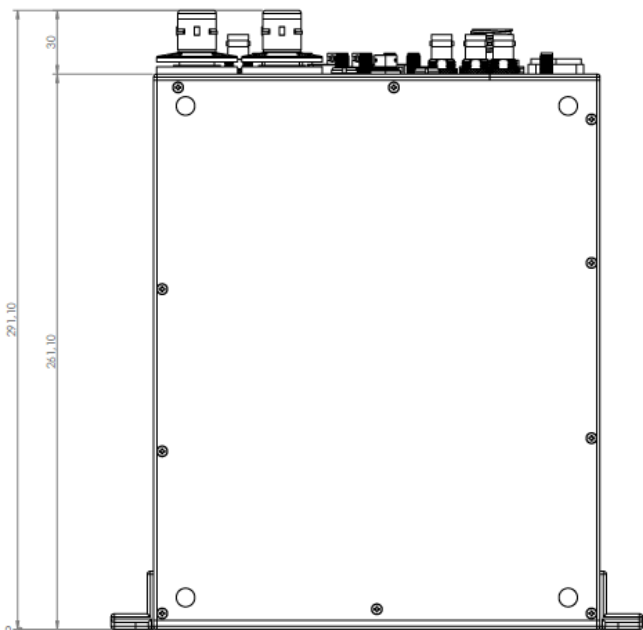
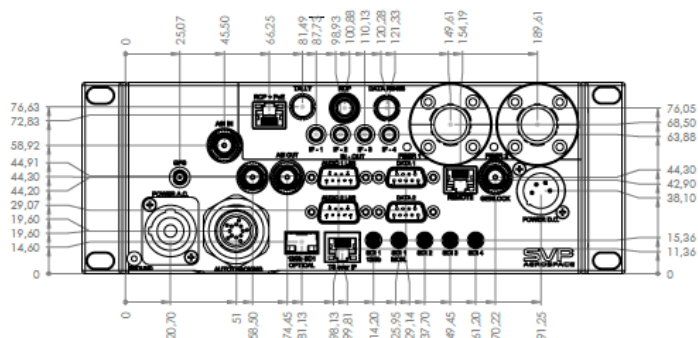
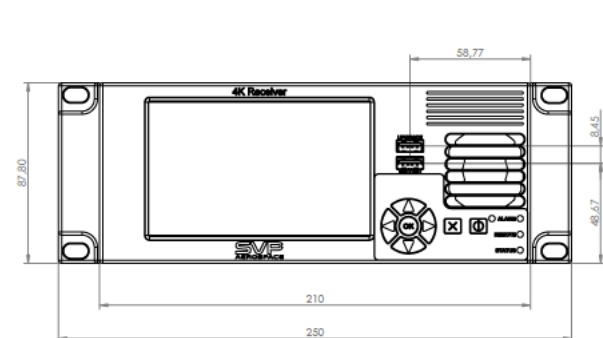
MECHANICAL

Size:	2 RU Half rack size.
Weight:	3.2 kg.

WIRELESS CAMERA CONTROL

Frequency:	403-473MHz.
Bandwidth:	25 KHz.
RF Power:	100 mW/500mW/1Watt.
RX Sensitivity:	-111dBm.
Data to RCP:	Serial (Hirose or DB-9). Ethernet + PoE.
Data to ODU:	Inside the SMPTE Optical Fiber. RS485 (Lemo 1B).
Available cameras:	Sony / Panasonic / Grass Valley.
Tally:	RED and GREEN.

MECHANICAL DIMENSIONS & HOW TO ORDER



UDR-104 Fiber-AITQ-UHD

