

HEVC DVB-T2/T Receiver

The new UDR-70 is a digital UHD portable receiver designed by SVP to perform DVB-T, DVB-T2, ISDB-T, DVB-S (optional) and DVB-S2(optional) demodulations. This two-box system with intermediate frequency of 70 MHz, consists of a control unit and one or more RF heads connected with optical fiber or triax cable. The distance between the control unit and the RF heads can be up to 400 m.

The control unit has a 70 MHz input connection available through which it is possible to receive the signal from the RF head via a triax cable.

It is an HEVC, H.264 and MPEG2 UHD professional broadcast quality decoder. Also, it works in 4:2:2 with 10 bits. Ultra-low latency (end-to-end) of 60ms is achieved as long as it is used together with SVP transmitters.

This receiver developed by SVP Aerospace has several outputs: 12G SDI, Transport Stream over IP, four 3G/HD/SD-SDI and 12G SFP. It offers the received signal in all outputs simultaneously.

ASI and Transport Stream over IP inputs enable the use of this receiver as a standalone decoder, and also the ASI and the Transport Stream over IP outputs enable to use the receiver as a demodulator.

It incorporates a complete Autotracking system by GPS and remote polarization control.



FEATURES

- Frequency bands: 2 to 11 GHz
- RF over fiber
- Transmission of true 4K UHD signals with HDR at 10-bit 4:2:2 quality
- H.264 HD or H.265 decoder covering formats from 720p60 to 2160p60
- End-end delay of 60ms (70ms in 4K)
- Power supply: 90 - 240 VAC & 9 - 36 VDC

OPTIONS

- 70 MHz over fiber-optic
- DVB-S2 and DVB-S compliant
- IP input/output
- AES 128 and AES 256
- Autotracking

APPLICATIONS

- Portable and Point-to-Point radio link
- SNG
- High performance decoder
- IP networks

Characteristics

RF stage

Frequency Bands:	2 GHz to 11 GHz
Tuning Step:	10 kHz
Input Level Range:	DVB-T2 @ 2 GHz: -20 to -102 dBm DVB-T2 @ 25GHz: -20 to -101 dBm
IF Frequency:	70 MHz over Triax 70 MHz over fiber-optic (Optional)

Demodulation

DVB-T2:	COFDM 1k, 2k, 4k mode QPSK, 16 QAM, 64 QAM, 256 QAM 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, 1/32, 1/128 Time Interleaving Bandwidth: 1.7, 5, 6, 7, 8 MHz Max. bit rate: 46.4 Mbps
DVB-T:	COFDM 2k QPSK, 16 QAM, 64 QAM 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. bit rate: 31.67 Mbps
ISDB-T:	COFDM 2k, 4k and 8k mode QPSK, 16 QAM, 64 QAM 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. bit rate: 31 Mbps
DVB-S2/S (optional):	DVB-S: QPSK DVB-S2: QPSK, 8PSK, 16APSK, 32APSK LDPC FEC (DVB-S2): 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 FEC (DVB-S): 1/2, 2/3, 3/4, 5/6, 7/8 Max. bit rate: 108.9 Mbps

Decoder

Modes:	HEVC, H.264 and MPEG-2
Audio decoder:	MPEG-1 Layer, MPEG-1 Layer2 and AAC-LC
Latency Encoder + Decoder:	UHD 59p = 66ms 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 1 x SFP 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 input:	Tri Level Composite

Audio

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

Data Channel

Data channel:	User Data/GPS
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, warning and logbook
Audio&Video:	TFT Video screen 5" Loud-Speaker Earphone Output

Autotracking (Optional)

Antenna Control:	Local GPS, Remote GPS, Compass and Inclinometer Control of QPT positioner
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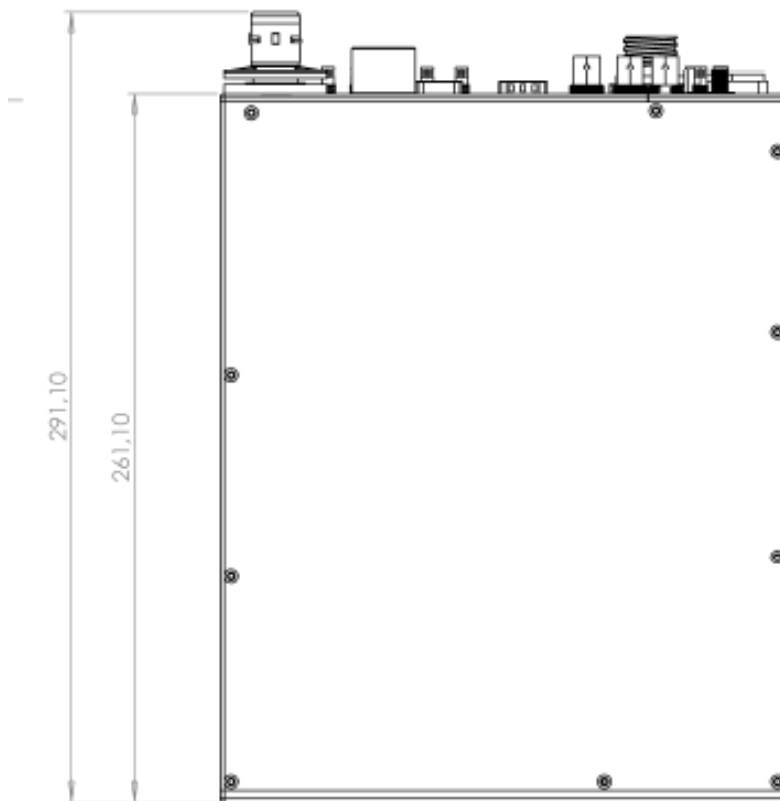
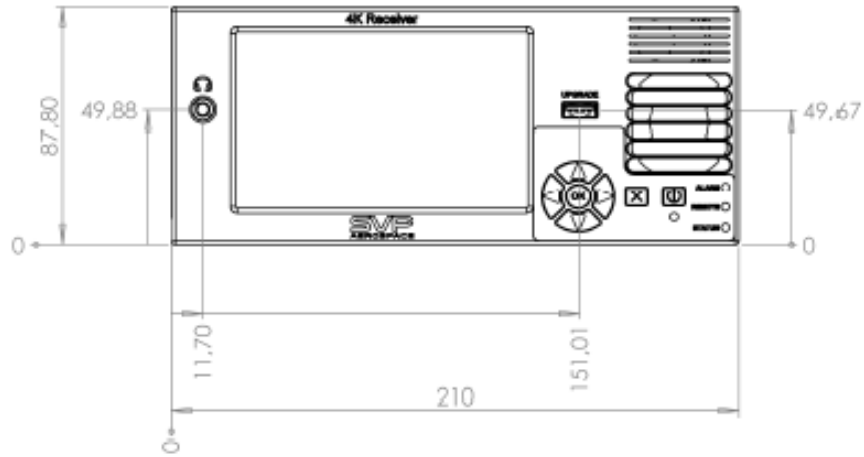
Power supply

AC input:	90 to 240 V
DC input:	9 to 36 V

Mechanical

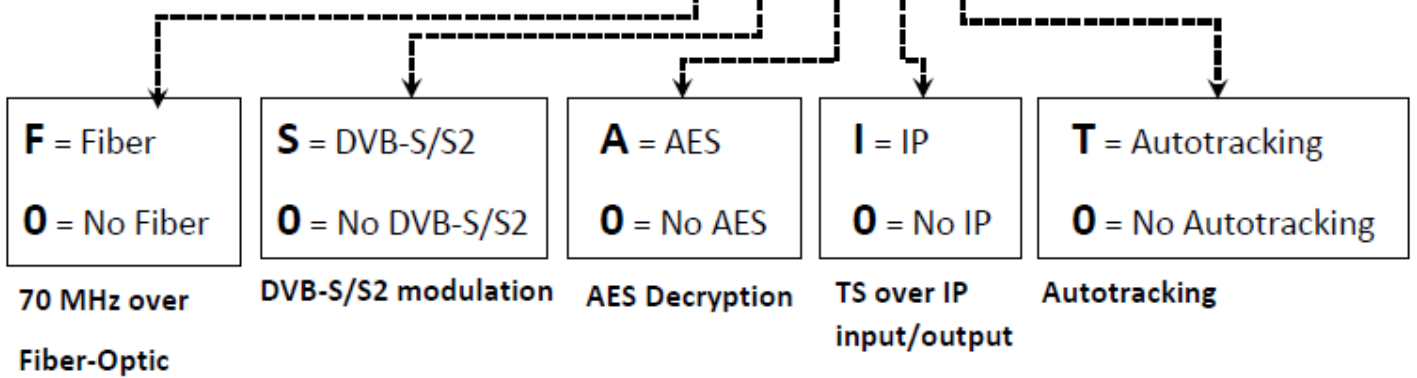
Control unit:	Size: 2 RE Half rack size Weight: 3.2 kg
RF head:	Size: 186 x 80 x 334 mm Weight: 4.6 kg
Max. disntace:	400 m (triax cable 11 mm) 2000 m with Fiber-Optic
Connector:	Triax Lemo 3 SMPTE Fiber-Optic Lemo

Mechanical drawing



How to order

U D R - 7 0 - **F S A I T**



Design and specifications are subject to changes without prior notice 03/21