UDR-70 4K Portable Reveiver

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 of 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 MPEG-2 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: 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 demo- dulator.

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

FEATURES

- Frequency bands: 2 to 13 GHz.
- 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 and 9 - 36 VDC.

OPTIONS

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

APPLICATIONS

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

ACCESSORIES

TP

SCDA

HAP_60

UDR-70 4K Portable Reveiver

CHARACTERISTICS

RF STAGE

Frequency range:	2 GHz to 13 GHz.
Tuning Step:	10 kHz.
Input level range:	DVB-T2 @ 2 GHz: -20 to -102 dBm. DVB-T2 @ 5 GHz: -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, 16QAM, 64QAM, 256QAM. 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. Time Interleaving. 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.
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 bitrate: 90.5 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).

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.

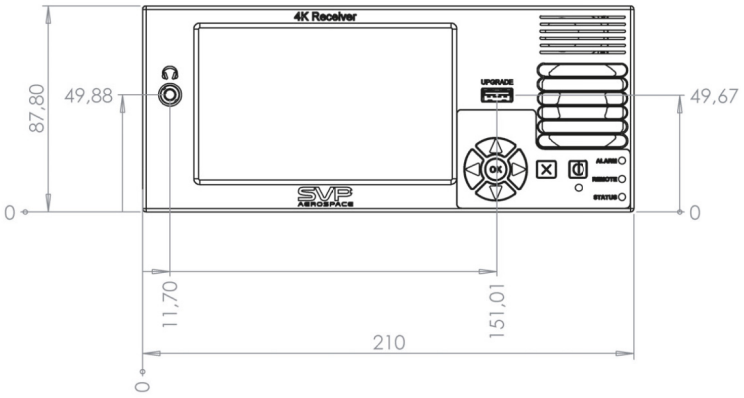
POWER SUPPLY

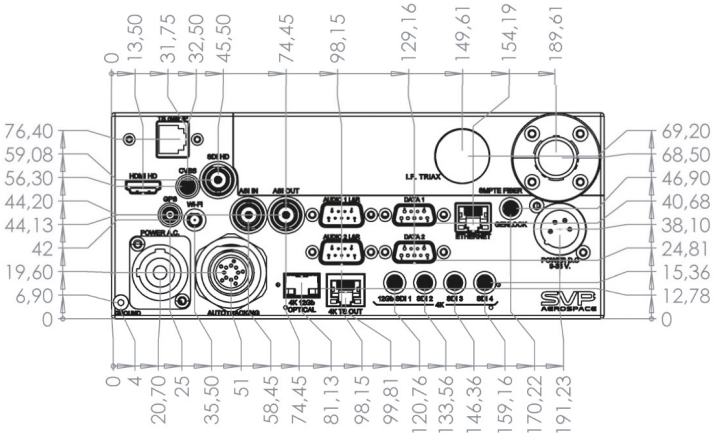
AC input:	90 to 240 V.
DC input:	9 to 36 V.

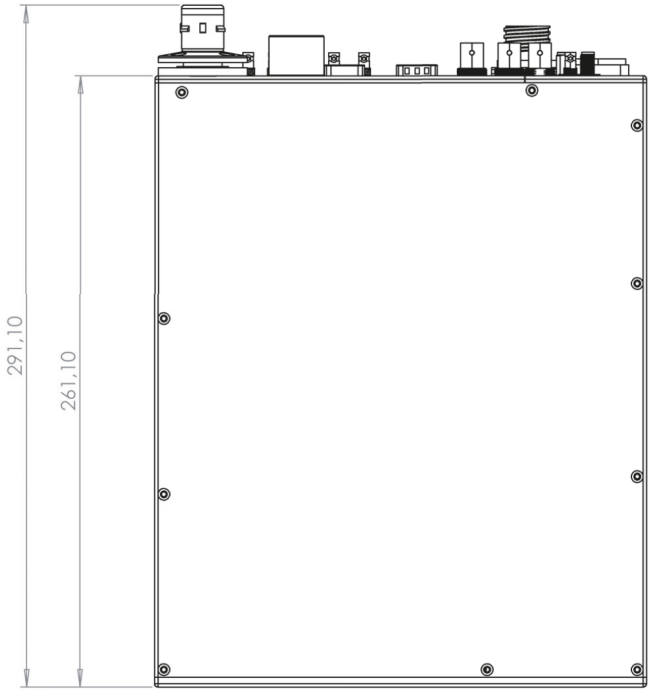
MECHANICAL

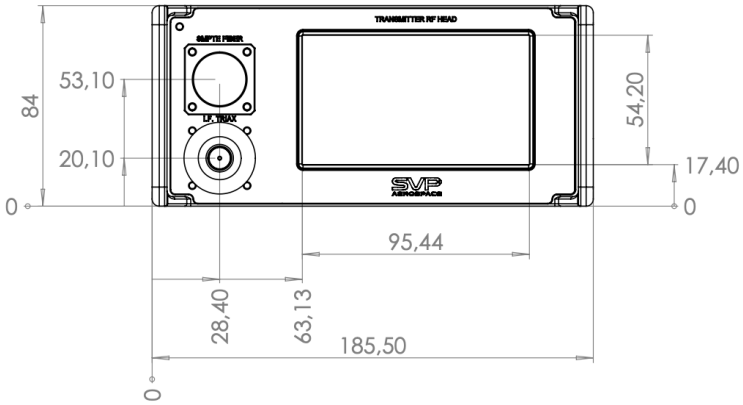
Control Unit:	2 RU Half rack size. Weight: 3.2 Kg.
RF head:	Size:186 x 80 x 334 mm. Weight: 4.6 kg.
Max. distance control unit- RF head:	400 m (triax cable 11 mm) / 2000 m with Fiber-Optic.
Control unit – IF head connection:	Triax Lemo 3 / SMPTE Fiber-Optic Lemo

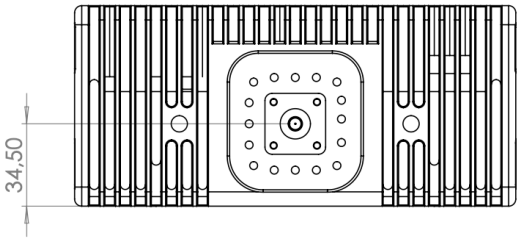
MECHANICAL DIMENSIONS

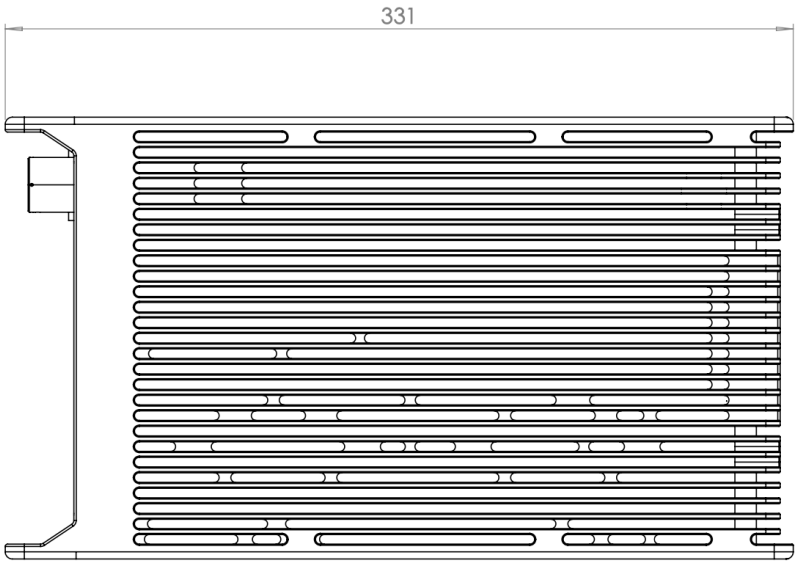












HOW TO ORDER

UDR-70-FSAITQ-UHD

F = Fiber 0 = No Fiber	S = DVB-S/S2 0 = No DVB-S/S2	A = AES 0 = No AES	I = IP 0 = No IP	T = Autotracking 0 = No Autotracking	Q = Quad Mode 0 = No QM	UHD = UHD & HD support HD = Only HD
70 MHz over Fiber-Optic	DVB-S/S2 modulation	AES Decryption	TS over IP input/output	Autotracking	Multivideo *Only available on UHD option	Video Format Option

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