

## H.264 - 4:2:2 DVB-T2/T Receiver

The new HDR-70 is a digital HD portable receiver designed by SVP Broadcast Microwave to perform DVB-T, DVB-T2, ISDB-T, DVB-S (optional) and DVB-S2(optional).The HDR-70 is a two-box system with 70 MHz intermediate frequency. It consists of a control unit and one or more RF heads connected with triax cable. The distance between the control unit and the RF heads can be up to 600 m. The control unit has available a 70 MHz input connection through which it is possible to receive the signal from the RF head via a triax cable. Besides, this control unit has another input connector in which the signal is received in the L band for DVB-S and DVB-S2.

It is an H.264 and MPEG2 HD/SD professional broadcast quality decoder, based on NTT technology. Also, it works in 4:2:2 with 10 bits. Ultra-low latency (end-to-end) of less than one frame is achieved as long as it is used together with SVP transmitters.

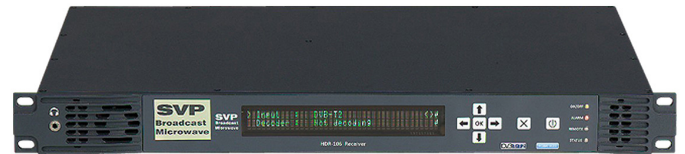
This receiver developed by SVP Broadcast Microwave has several outputs: analogue video, Transport Stream over IP, 3G/HD/SD-SDI and HDMI outputs. It offers the received signal in all outputs simultaneously.

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.



Duplexor SCDA



Internal Unit



External Unit

H.264 4:2:2

**DVB-S2**

### FEATURES

- Frequency bands: 2, 4, 6, 7 and 10 GHz
- NTT-NEL H.264 compression technology
- Highest video quality available
- Lowest Delay in H.264: 33 ms
- Power supply: 100 - 265 VAC & 20 - 36 VDC
- BISS-1 and BISS-E encryption
- ASI and Transport Stream over IP with FEC input and output
- HDMI output
- Integrated autotracking system by GPS: Sectorial and 2 axis positioner
- Remote Polarization Control

### OPTIONS

- DVB-S2 and DVB-S compliant
- IP input/output
- AES 128 and AES 256

### APPLICATIONS

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

## Characteristics

### RF stage

Frequency Bands:	2 GHz, 4 GHz, 6 GHz, 7GHz and 10 GHz
Tuning Step:	10 kHz
Input Level Range:	-20 to -99 dBm
IF Frequency:	70 MHz

### DVB-T2 and DVB-T

### Demodulation

DVB-T2:	COFDM 1k, 2k, 4k, 8k, 8k ext 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: 49.9 Mbps
DVB-T:	COFDM 2k 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: 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

H.264:	Profile: Baseline, Main, High, High 422 (supports 10 bits) Level: 4.1 - 4.2 Latency: 33 ms and Standard Delay
MPEG-2:	Profile: 422P@HL, MP@HL, 422P@ML, MP@ML
Audio Decoder:	MPEG-1 Layer I/II
Max. Input Bitrate:	320 Mbps
Genlock input:	Black burst or tri-level, Genlock loop

### Decryption

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

### Data Channels

Data channel:	User data or GPS data
Data rate:	1.200 to 57.600 bps

### ASI and IP

Outputs and Inputs:	ASI Transport Stream (EN50083-9) Transport Stream over IP (Optional) SMTP2022/CoP3) - FEC
Max. TS packets / IP packet:	7

### Video

Outputs:	1xComposite video (PAL/NTSC) 2xSD-SDI, HD-SDI and 3G-SDI HDMI (1.4)
Formats:	<b>1080p</b> (1920x1080) - 23,98/ 24/ 25/ 29.97/30/ 50/ 59,94/ 60 Hz <b>1080i</b> (1920x1080) - 50/ 59,94/60 Hz <b>720p</b> (1280x720) - 23,98/ 24/ 25/ 29.97/30/ 50/ 59,94/ 60 Hz <b>576i</b> (720x576) - 50 Hz <b>480i</b> (720x480) - 59,94 Hz

### Audio

Output	HDMI/ SDI Embedded/ AES Digital/ Analogue
Analogue:	2 Stereo/ 4 Mono
SDI embedded:	1 group (4 audio channels)
AES/EBU:	2 stereo channels

### Control & Monitorization

Control Interfaces:	Front panel and display Web server SNMP
Monitoring:	Decoder parameters Demodulation parameters Frequency and input level MER, BER, C/N Alarms, warning and logbook
Video & Audio:	TFT Video screen 2" 2x Stereo loudspeakers Earphone output

### Antenna Control

Parabolic:	Autotracking with positioner in 2 axis Remote Polarization Control
Multisector:	Autotracking with panel switching

### Power supply

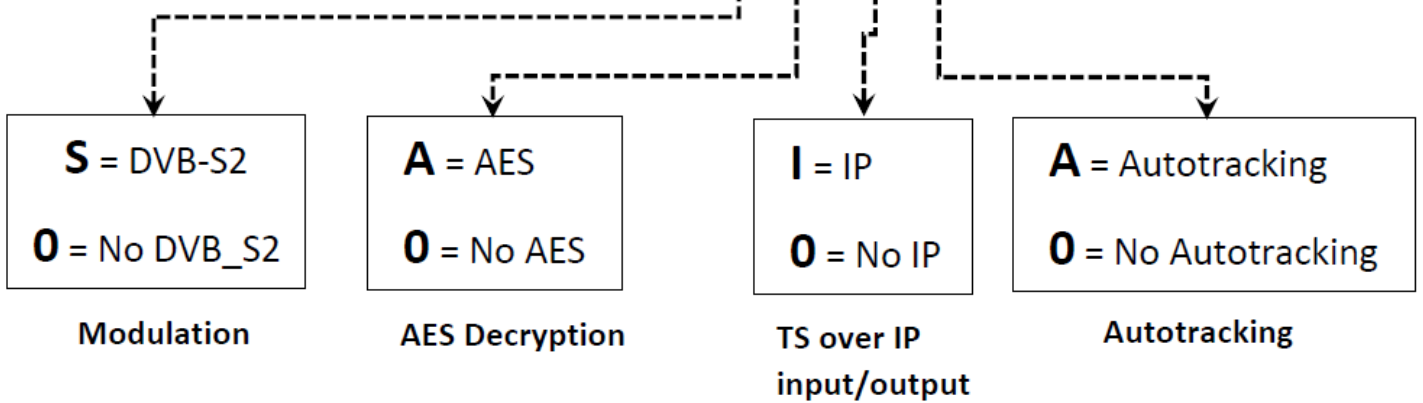
AC input:	90 to 240 V
DC input:	20 to 36 V

### Mechanical

Control unit: (IDU)	Size: 1 RU, 240 mm depth Weight: 3 kg
RF head: (ODU)	Size: 185.5 x 79 x 333 mm Weight: 4,4 kg
Temperature range:	-30 to 50 °C

How to order

HDR-70-S A I A



Design and specifications are subject to changes without prior notice 04/18