

The UDT-70 is the new portable transmitter developed by SVP Aerospace. Its characteristics, achievable only by SVP, make it the most advanced transmitter in the market today.

It features HEVC, H.264 and Mpeg-2 encodings 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 transmitter is the ability to transmit one 4K UHD signal with HDR at 10-bit 4:2:2 quality or 4 simultaneous 1080p50/59HD signals.

The ASI output enables the use of the transmitter as a standalone encoder.

This portable transmitter performs DVB-T, DVB-T2 and optionally DVB-S and DVB-S2 modulations.

The UDT-70 transmitter's reliability and exceptional RF and IF performance make it suitable for: point-to-point links, use as high performance Encoder, operation in different countries.



FEATURES

- Frequency bands: 2 GHz to 13 GHz.
- BISS-1 and BISS-E encryption.
- ASI Over IP (optional)
- AES 128 and AES 256 (optional)
- ASI Remux (optional)

OPTIONS

- TS over IP input/output
- AES 128 and AES 256
- Remux
- Integrated GPS receiver
- KLV Metadata embedded on SDI
- Fiber Optic Interface
- Quad mode

APPLICATIONS

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

Characteristics

RF STAGE DVB-T2 & DVB-T

Frequency range:	2 GHz (2.0GHz – 2.4GHz) 4 GHz (4.4GHz – 4.9GHz) 6 GHz (6.28GHz – 6.9GHz) 7 GHz (6.8GHz – 7.4GHz) 8 GHz (7.855GHz – 8.225GHz) 10 GHz (10.15GHz – 10.65GHz) 13 GHz (12.75GHz – 13.25GHz)
Output Power:	3 W in 2 GHz band (adjustable) 1 W in 4 GHz band (adjustable) 1 W in 6 GHz band (adjustable) 1 W in 7 GHz band (adjustable) 1 W in 8 GHz band (adjustable) 1 W in 10 GHz band (adjustable) 0.5 W in 13 GHz band (adjustable)

MODULATION

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, 1/32, 1/128 Time Interleaving Bandwidth: 1.7, 5, 6, 7, 8 MHz Max bitrate: 46.4 Mbps
DVB-T	COFDM 2K mode QPSK, 16QAM, 64QAM LDPC 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
DVB-S2 (Optional)	QPSK, 8PSK, 16APSK, 32APSK LDPC FEC: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 Max.Symbol Rate: 31Msymb/s Max.Bitrate: 90.5Mbps Max.Bandwidth: 30MHz
DVB-S (Optional)	QPSK Reed Solomon FEC: 1/2, 2/3, 3/4, 5/6, 7/8 Baud Rate: 22.2 Msymb/s Max.Bitrate: 35.802Mbps Max.Bandwidth: 30MHz

IF STAGE (70 MHZ TRIAX) DVB-T2, DVB-T, DVB-S2 & DVB-S

Output Connector	70 MHz Triax-Lemo3 Fiber-Optic SMPTE (Optional)
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RF AUXILIARY OUTPUT DVB-T2 & DVB-T

Output Connector	2.0 to 2.4 GHz SMA Female
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VIDEO

Inputs	1 x 12G-SDI, 2 x 6G SDI 4 x 3G, HD, SD-SDI (Optional)
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

AUDIO

Quantity	16 channels (8 pairs)
Analogue Input	2 pair Line / Mic level
Formats	Embedded or Analogue
Analogue Max. Level	24dBu (Balanced)
Phantom Power	48V Phantom Power

TEST SIGNALS

Video	Bars
Audio	16 Audio tones

DATA CHANNELS

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

ASI & IP

Input and Output	ASI Transport Stream Transport Stream over IP Input and Output (Optional)
Remux (Optional)	ASI Remux

ENCRYPTION

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

ENCODER

Video compression Profile	HEVC H.264 and MPEG2 4:2:2/4:2:0, 8/10-bit
Latency	UHD 59p = 66ms UHD 50p = 75ms
Output Bitrate	1 Mbps – 90 Mbps
Encoder+Decoder	FHD 59p = 55ms FHD 50p = 70ms FHD 59i = 83ms FHD 50i = 98ms
Audio Encoder	MPEG-1 Layer1, MPEG-1 Layer2 and AAC-LC

CONTROL & MONITORIZATION

Control interfaces	Front panel and display Web Server interface
Monitoring	Encoding parameters Modulation parameters Frequency and output power Alarms and warnings

POWER SUPPLY

AC input	100 to 240 V AC
Consumption	RF Head: 60W Control Unit: 40W
DC input	24 to 36 V DC

MECHANICAL

Control Unit	2 RU Half rack size Weight: 3.2 Kg
RF head (size)	Width: 185.5mm Height: 84 mm Depth: 339 mm Weight: 4.6 kg
Max. distance control unit – RF head	2Km with Fiber-Optic/400 m (triax cable 11 mm)
Control unit – IF head connection	Triax cable 8 or 11 mm SMPTE Fiber-Optic (Optional)

How to order :

