

The HDT-04 is the new high power transmitter developed by SVP Aerospace. An excellent, reliable and comfortable solution for a wide variety of applications.

This device performs DVB-T and DVB-T2 modu-lations and H.264 – 4:2:2 encoding for HD and SD signals. It is available in different frequency bands.

Thanks to these features, it expands the possibilities of COFDM digital links on the market using linearization technology to minimize distortion and providing superior signal quality for complex multicarrier modulations.

Control, operation and monitoring of the HDT-04 transmitter is very friendly. All the parameters can be configured in the field. A wide range of accessories allow the use of this equipment in many different applications. It is especially designed for audio-visual broadcasting and surveillance applications where KLV metadata monitoring is needed.

For applications of high security, the HDT-04 transmitter has the option of the AES-128 and AES-256 encryption.

## **ACCESSORIES**







1500



GPS







Arinc Front Hook

RTC-03

Auxiliary Cover HDT-04





## **FEATURES**

- Auxiliary RF output to external PA.
- High linearity.
- Power supply range: 9-36 VDC.
- Isolator for protection against high VSWR.
- Remote control through RTC-03.

## **OPTIONS**

- AES-128 and AES-256 Encryptions.
- KLV Metadata.
- Remux.
- Internal GPS Receiver.
- KLV metadata embedded on SDI.
- Remotely controllable via ARINC 429.
- MIL-STD 1553B Mission bus
- Clamping compatible with ARINC 404.

## **APPLICATIONS**

- Aircraft Downlink System
- News Gathering Vans
- Motorbikes
- Ships





## **CHARACTERISTICS**

## **RF STAGE**

Frequency range: 1,300 to 1,600 MHz.

1,700 to 2,200 MHz. 1,900to 2,500 MHz. 2,300to 2,700 MHz. 3,300to 3,600 MHz. 4,400 to 5,000 MHz. 5,000to 5,300 MHz.

Max. Output power: 10 W (1,300 to 1,600 MHz).

10 W (1,700 to 2,200 MHz). 15 W (1,900 to 2,500 MHz). 15 W (2,300 to 2,700 MHz). 10 W (3,300 to 3,600 MHz). 10 W (4,400 to 5,000 MHz). 5 W (5,000 to 5,300 MHz).

Output impedance: 50 ohm. SNR: >30dB.

Protection capabilities: Short circuit.

Reverse power. Overvoltage.

## **MODULATION**

**DVB-T2:** COFDM 1K, 2K, 4K.

QPSK, 16QAM, 64QAM, 256QAM.

Constellation rotation.

LDPC FEC: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6.

IG: 1/8, 1/16, 1/32. Bandwidth: 1.7, 5, 6, 7, 8 MHz. Max bit rate: 46.4 Mbps.

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.

#### **VIDEO**

DVB-T:

Inputs: 3G-SDI SMPTE-425M-A.

HD-SDI SMPTE-292M (299M). SD-SDI SMPTE-259M (272M).

HDMI (1.4a).

Composite video (PAL/NTSC).

Formats:  $1080p - 23.98/24/25/29.97/30/50/59.94/60 \ Hz.$ 

1080i - 50/59.94/60 Hz.

**720p** – 23.98/24/25/29.97/30/50/59.94/60 Hz.

**576i** (PAL) - 50 Hz. **480i** (NTSC) -59.94 Hz.

## **AUDIO**

Inputs:SDI Embedded.Analogue:HDMI Embedded.SDI Embedded:AES Digital.

AES Digital: Analogue. Phantom voltage.

2 Stereo / 4 Mono. 1 group (4 audio channels).

Micro or Line Level. 2 stereo channels.

## **TEST SIGNALS**

Video: Bars with moving icon.
Audio: 4 Audio tones.

#### **DATA CHANNELS**

Number of Data Channels: 2.

Data Channel User data.

Data Channel rate: 1,200 to 230,400 bps.

GPS Channel: Internal GPS data.

GPS Data Rate: 4,800 bps.

#### **ASI**

Input and Output: ASI Transport Stream (EN50083-9).

Extra Feature: Remux (optional).

## **ENCRYPTION**

BISS: BISS-1 and BISS-E.

AES: AES-128 and AES-256 (optional).

### **ENCODER**

Video compression:H.264 / MPEG-4 Part 10.Profile:High 422, High, Main.Level:3.0 / 3.1 / 3.2 / 4.0 / 4.1.Latency:Low delay: 33 ms.Audio compression:MPEG-1 Layer II.

 Audio bit rate:
 128, 192, 256 or 384 Kbps.

 Output bitrate:
 1 Mbps – 100 Mbps.

### **CONTROL & MONITORIZATION**

Control interfaces: Front panel and display.

ARINC 429 (Optional).

MIL-STD 1553B Mission bus(Optional).

Web browser. RTC-03.

Monitoring: Encoding, modulation, frequency and output

power, alarms, warnings and logbook.

**Presets:** 7 user defined presets.

Alarms: Alarms and Measurements are sent via Radio to

the receiver.

## **POWER SUPPLY**

**DC input:** 9 to 36V. **Power Consumption:** 130 W.

### **MECHANICAL**

**Size (WxHxD):** 123.5 x 121.22 x 228.5 mm.

Weight: 3.3 kg.

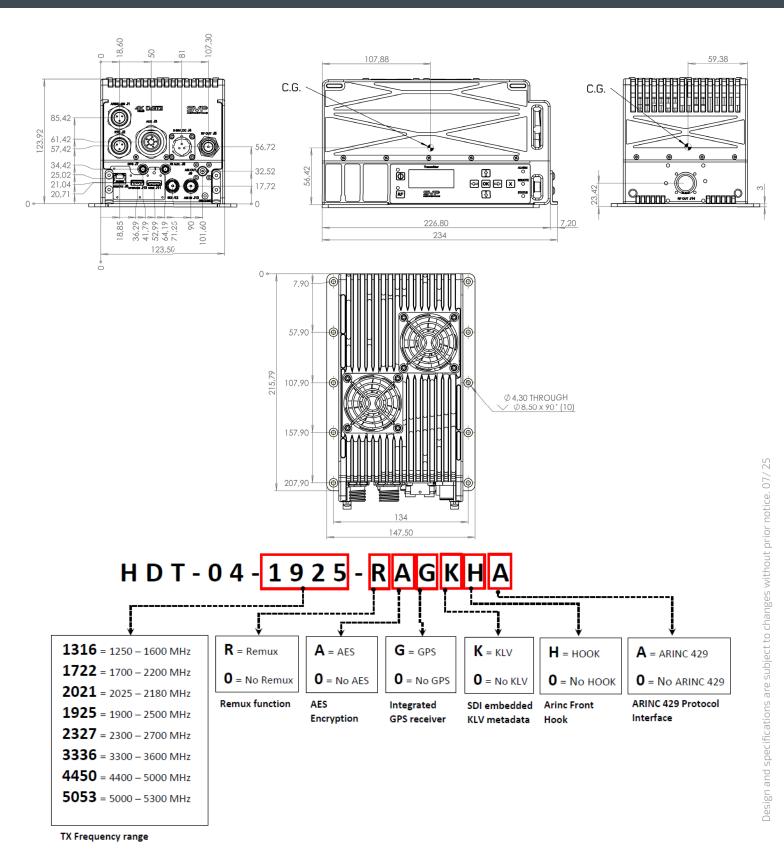
### **ENVIRONMENTAL**

**Temperature range:** -20 to 45°C.

Aeronautical: RTCA/DO-160 compliant.



# **MECHANICAL DIMENSIONS & HOW TO ORDER**





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