

## DUCKTV LINEAR SPECIFICATION

### Linear feed delivery

There are four options for delivery source feeds to operator:

#### 1. Private Line to exchange points

Operator will connect with the ducktv exchange point in Bratislava (SK), Warsaw (PL), Bucharest (RO), or Frankfurt (DE) by L2 ethernet line.

Source video is delivered over MPEG 2 TS over multicast IP.

- SWAN, a.s. Colocation Center, Údernicka 15, 851 01 Bratislava, Slovakia
- SIX.SK, Nám. slobody 17, 812 43 Bratislava, Slovakia
- Sitel, Kopčianska 20/c, 851 01 Bratislava, Slovakia
- Equinix, FR5, Kleyerstraße 90, Frankfurt 60326, Germany
- Equinix, WA1 (PLIX), Aleje Jerozolimskie 65/79, 00-697 Warsaw, Poland
- NXDATA-2, BU2, 6-A Dimitrie Pompeiu Blvd., 020335 Bucharest, Romania

#### 2. Internet via ducktv streaming server

ducktv provides stream from Wowza Streaming Engine.

For stream distribution it is supported PUSH or PULL method over the public internet.

Source video can be delivered as either:

- RTMP over Wowza Streaming Engine
- HLS over Wowza Streaming Engine

#### 3. Internet via ducktv encoder (receiver)

Stream can be transported over the Public internet or Akamai Media Delivery Network to receiver.

Video can be delivered for operator as:

- MPEG2 TS over multicast IP
- SDI

Device is rack mountable, 1U high and have one power source.

- Height: 1.7" (43 mm) × Width: 17.2" (437 mm) Depth : 9.8" (249 mm)
- Gross Weight: 10 lbs (4.54 kg)
- Total Power Input: 100 - 240Vac
- Total Power Output: 200W
- Operating Temperature Range: 0°C - 40°C (32°F - 104°F)
- Packaging (W x H x L): 25.8" (655 mm) x 6.1" (155 mm) x 18.3" (465 mm)

Picture 1: Encoder with UDP Output Support



Picture 2 : Encoder with UDP and SDI Output Support



#### 4. Satellite / IRD

Linear signal is available by THOR 5 – T2 satellite via IRD. This option is available only for ducktv SD channel. THOR 5 – T2 satellite have Pan-European coverage.

<https://www.telenorsat.com/satellite-fleet/thor-5-t2/>

#### 5. Audio/Video formats

ducktv supports a wide variety of video and audio formats in use today. Supported formats are listed below. Alternate formats require discussion with the ducktv technical team at the e-mail addresses:

[ivana.polakova@ducktv.tv](mailto:ivana.polakova@ducktv.tv) ; [lukas.zahora@symbios.sk](mailto:lukas.zahora@symbios.sk)

#### Supported Video Output

	<b>1080i</b>	<b>720p</b>	<b>SD</b>
<b>Resolution</b>	1920×1080	1280×720	720×576
<b>Aspect Ratio</b>	16:9	16:9	16:9
<b>Frame rate</b>	25 frames/sec (PAL)	25 frames/sec (PAL)	25 frames/sec (PAL)
<b>Codec and bitrate</b>	MPEG-4 Part 10 (AVC/H.264) @ 8 Mbps	MPEG-4 Part 10 (AVC/H.264) @ 4 Mbps	MPEG-4 Part 10 (AVC/H.264) @ 2 Mbps
			MPEG-2 @ 6 Mbps

#### Supported Audio Output Formats

	<b>Stereo</b>	<b>Multi-Channel</b>
<b>Codecs</b>	<ul style="list-style-type: none"><li>• AAC</li><li>• AC3</li><li>• MPEG-A if using MPEG-2 video</li></ul>	-
<b>Bitrate</b>	256 kbps	-
<b>Sampling rate</b>	44100 Hz	-
<b># of channels</b>	2	-

#### Guide Data

Metadata for linear channels are available from FTP in various formats.

#### Ad Insertion Triggers

If the operator would like to use dynamic ad insertion capabilities, the source feed can include SCTE-35 splice insert triggers, in-band, and with duration.

This case require discussion with the MEGA MAX MEDIA, s. r. o. marketing and technical team at the e-mail addresses:

[ivana.polakova@ducktv.tv](mailto:ivana.polakova@ducktv.tv); [lukas.zahora@symbios.sk](mailto:lukas.zahora@symbios.sk)