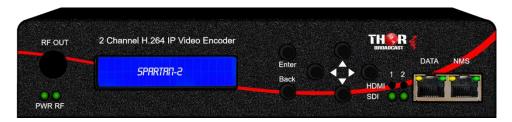# Datasheet : H-SPARTAN-2

2 Channel 3G-SDI / HDMI H.264 IP Video Streaming Encoder

INTRODUCTION

Compact dual channel HDMI and 3G-SDI encoder.

Input up to 1080/60P HDMI or 3G-SDI full HD resolution video sources for encoding H264 output.

Two channel unit with your choice of HDMI and SDI inputs with an extensive GUI for control of audio/video bitrate, PID's, with one RJ45 port for up to 1Gbps output.

Use any HDMI source or SDI source for easing streaming to your LAN or output using protocols for Facebook and Youtube.

IPTV distribution over LAN most of the time utilizes UDP or RTP Multicast protocol because it allows point-to-multipoint video & audio distribution. This protocol allows smart IP broadcast over a LAN, essentially any IP device can receive that encoded MPEG TS stream generated by the IPTV encoders.
As an example, you can receive those streams on Smart TV's equipped with a UDP decoding application or software; on PCs and most popular app is VLC player, but using PC's are very inconvenient when we want to convert those to an HDMI output so you can display them on the TV's or Monitors on the network. In those cases we recommend that you use IPTV STB's which are essentially IP to HDMI converters.
Thor has IPTV to HDMI decoders available :

FEATURES

- 2SDI / 2 HDMI Input up to 3G-SDI @1080 60p
- Low Latency & Low bit rate (2~14Mbps)
- Support CBR/VBR control mode
- LCD & Web controlled, updated via Web
- Support UDP/RTP (Unicast/Multicast), HLS,
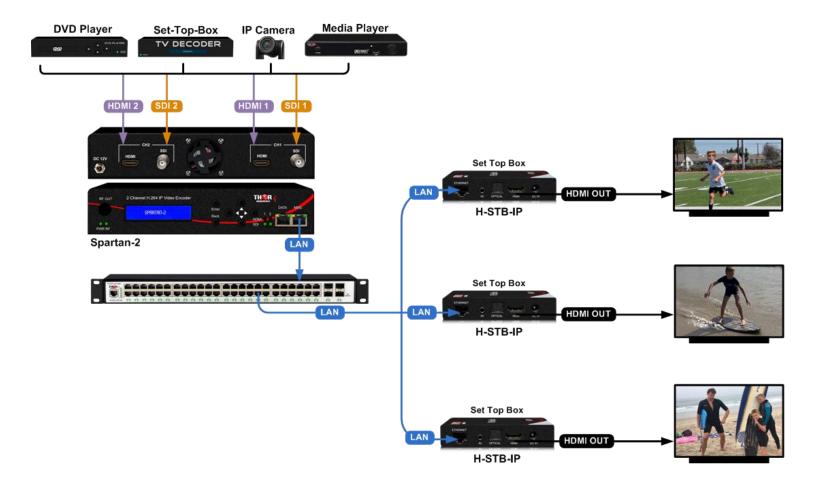- 4:2:0 and 4:2:2 Chroma

SPECIFICATION

Interfaces	
Input	2 x HDMI, 2 x 3G-SDI
Output	1 x RJ45, 1Gbps IP Streaming, Protocols: UDP/RTP (Unicast/Multicast) / HLS
Control	LCD with 6 keys & 1 x RJ45 (Web NMS)
Video Encoding	
Format	HD:H.264 AVC/HP@L4.0
Resolution	Input: 1080 50/60p, 1080 50/60i, 720 50/60p, 480i, 576i Output: up to 1080p30
Bitrate	HDMI: 2~14Mbps SDI: 2~14Mbps
Rate Control	CBR/VBR
Chroma Sample	4:2:0, 4:2:2
GOP Structure	IBBP
Audio Encoding	
Format	Mpeg1L2, AAC, Dolby AC3
Bitrate	64 ~ 384Kbps
Sample Rate	44.1 KHz, 48.0 KHz
General	
Power Supply	DC 12V 2A
Display	LCD panel @ 2 x 16 characters LED X5 (Ch1~2, HDMI/SDI/PW)
Dimension	220 x 206 x 44mm
Weight	1000g
Environmental for operating	Temperature: 5°C- 40°C Relative Humidity: 80% @ 30°C

DRAWING