



Product Overview

The DEXIN NDS3214A 4-in-1 MPEG-4 AVC/H.264 HD encoder is our newest professional HD audio & video encoding and multiplexing device with powerful functionality. It is equipped with 4 HDMI (or SDI) channels input supporting MPEG-4 AVC/H.264 High Profile code format & main Profile code format, and also 1 ASI input for re-mux. It can multiplex the ASI input TS and the 4 encoded SPTS to generate a MPTS output with the inserted PSI/SI information. In conclusion, its high integration and cost-effective design make this device widely used in variety of digital distribution systems such as CATV digital head-end, satellite and terrestrial digital TV, etc.

Key Features

- Support 4 HDMI/SDI channels input & 1 ASI Input
- Support H.264/AVC video encoding
- Support MPEG1 Layer 2 (MPEG-2 AAC and MPEG-4 AAC optional) audio encoding;
AC3 Passthrough (For HDMI)
- Support HD (1080i/720p_50/60) to SD (576p/480p_25/30) resolution downscale conversion
- Support audio gain control
- Support PSI/SI editing and inserting
- Support VBR/CBR video bitrate mode
- Support 720P, 1080I, 1080P HD video format
- Support ASI output
- Support IP Output MPTS and 4 SPTS over UDP/RTP
- Support IP null packet filter
- Real-time output bit-rate monitoring
- Update device through NMS port
- Support LCD / keyboard operating, and network management (Web)

Specifications

Input	4×HDMI (or SDI) inputs	
	1 ASI input, BNC interface	
Video	Resolution	1920×1080_60P, 1920×1080_50P
		1920×1080_60i, 1920×1080_50i
		1280×720_60P, 1280×720_50P
		720×576_50i, 720×480_60i
	Encoding	MPEG-4 AVC/H.264
	Bit-rate	0.8Mbps~19Mbps (each channel)
	Rate Control	CBR/VBR
	GOP Structure	IBBP
Advanced Pretreatment	De-interlacing, Noise Reduction, Sharpening	
Audio	Encoding	MPEG-1 Layer 2 (MPEG-2 AAC and MPEG-4 AAC Optional) AC3 pass through (for HDMI)
	Sampling rate	48KHz

	24-bit	Resolution
	Bit-rate	64Kbps~384Kbps each channel
	Audio Gain	0-400
Multiplexing	1 ASI input multiplexed with local 8 channels of TS	
Stream output	2*ASI output, BNC interface	
	MPTS and 4 SPTS over UDP/RTP, 1000 Base-T Ethernet interface (unicast / multicast);	
System function	LCD/keyboard operating, net manager (Web)	
	Chinese-English control interface	
	Ethernet software & hardware upgrade	
Miscellaneous	Dimension (W× L× H)	440mm×410mm×44.5mm
	Approx weight	4kg
	Temperature	0~45°C(work), -20~80°C (Storage)
	Power	AC 100V-220V±10%, 50/60Hz
	Consumption	25W

Technical Comparison

	NDS3214A/NDS3218A (HDMI)	NDS3542L
Chipset	Fujitsu	Hisilicon
Video Channel	4/8×HDMI optional	4/8/12/16/20/24×HDMI optional
Video Bit Rate	0.8Mbps~19Mbps each channel (Bit rate is with a low fluctuation, suitable for cable system and satellite uplink)	1Mbps~13Mbps each channel (Bit rate is with a high fluctuation, suitable for cable system, not suitable for satellite uplink)
GOP	IBBP	GOP Size=25 (without B Frame)
Resolution	Up to 1080p-60 (1080i/720p_50/60 to SD 576p/480p_25/30 downscale conversion)	Up to 1080P-30 (1080i/p-60/50 to 1080p-30/25 downscale conversion)
Audio Encode	MPEG-1 Layer II; HE-AAC V2, LC- AAC Optional; AC3 passthrough	MPEG-1 Layer II
Audio Gain	0-400 Adjustable	0-255 Adjustable
ASI In & Mux	Yes	N/A
ASI output	Yes	Option as required
IP output	SPTS and 1MPTS	SPTS and 1MPTS (for 4/8/12 channel) SPTS or 1MPTS (for 16/20/24 channel)

Principle Chart

