

NDA310L,A320L HD-Sdi H. 264 Encoder, Decoder

1. Overview

Newbridge® NDA310L/NDA320L HD-SDI H.264 Codec adopts industrial level design, reliable performance, and outstanding quality, support ONVIF 1.0/2.0. The Encoder supports 1 channel SD/HD input interface and supports high definition digital video which is up to 1080p30 and AES/EBU embedded audio. The SDI can output with loop back circuit simultaneously.

The Decoder receives signal from the Encoder from TCP/IP network. After getting through the self-adaptive decoding, it will output video/audio signals as the SD/HD standard signal formats. The Decoder can output 2 channel SDI signals simultaneously. Even if the Decoder connects with an encoding video of low code rate, the network packet loss is only about 10% because of the integration of image enhancement and fault-tolerant technology. It can clearly restore encoding video and audio with no obvious distortion, smear, frame loss and mosaic.

2. Features

 <p>NDA310L HD-SDI H.264 Encoder</p>	<ul style="list-style-type: none"> ● Support SD/HD-SDI interface and AES/EBU embedded audio ● Support various formats of 525i/625i, 720p@23.98/24/25/29.97/30/50/59.94/60, 1080i@50/59.94/60, 1080p@23.98/24/25/29.97/30 ● H.264 High profile compressing technology ● Support dual-stream HD and SD output, encoding code rate is adjustable, picture quality can be controlled ● Support two-way voice talkback, RS-485 signaling get through and alarm semaphore get through ● Support RTP/RTSP、Onvif1.0/2.0
 <p>NDA320L HD-SDI H.264 Decoder</p>	<ul style="list-style-type: none"> ● Support SD/HD-SDI interface and AES/EBU embedded audio, dual SDI output interface ● Support various formats of 525i/625i, 720p@23.98/24/25/29.97/30/50/59.94/60, 1080i@50/59.94/60, 1080p@23.98/24/25/29.97/30 ● Intelligent network delay control, typical network environment is less than 150ms decoding delay ● Image enhancement and fault-tolerant technology, error resilience capability, excellent image quality ● Support two-way voice talkback, RS-485 signaling get through and alarm semaphore get through ● Support RTP/RTSP、Onvif1.0/2.0

3. Specifications

Model	NDA310L	NDA320L
Type	Encoder	Decoder
Input interface	1x BNC	SDI---
Output interface	1x BNC (SDI Looping Out)	2x BNC SDI
Analog voice Frequency input/Output	1x industrial Terminal Block Unbalanced Connection	
Alarm Semaphore	1x industrial Terminal Block	
RS-485 Connector	1x industrial Terminal Block	
Network Connector	1x RJ45, Ethernet Connected	
Output signal Type	SD-SDI(270Mbps), HD-SDI(1.485Gbps)	
Support input Format	1080p 24/25/30, 1080i 60/50, 720p 60/50, 480i/p, 576i/p	
SDI Signal Range	0.8V p-p	
SDI impedance	75 ohms	
SDI Coupling Type	AC Coupling	
Video Compression Standard	H.264 High profile	
Audio Compression Standard	AAC-LC	
Video Encoding Code Rate	512kbps~30Mbps	
Audio encoding Code Rate	64Kbps	
Encoding Delay	< 50ms	
Decoding Delay	---	< 150ms
Media Transmission Protocols	RTP/RTSP, Compatible RTP over TCP Transmission ,Mode	
Signal protocol	TCP	
Network Management protocol	HTTP	
Management interface	Web	
Remote Management/Remote Firmware	Yes	
Power Supply	5V~24V DC	
Power Consumption	10 Watts (max)	
Operating Temperature	0°C ~ 40°C / 32°F ~ 140°F	
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F	
Relative Humidity	20~90% RH (Non-condensation)	

4. Application Diagram

