



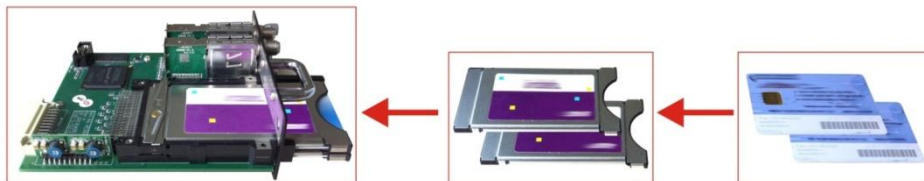
NDS356X Series

SD IRD

DVB-C, T/(T), ISDBT, S/S2/S2X RF → CVBS



Demodulation Module = 2\*RF/Loop out + 2\*CAM + 2\*Smartcard



## Product Introduction

NDS356X Series SD IRD is DEXIN's all-in-one device which integrates demodulation, de-scrambler and decoding (DVB-C, T/(T), ISDBT, S/S2/S2X optional) in one case to convert RF signals into analogue video (CVBS) output.

It is a 1-U case which supports 2 tuner inputs. The two CAMs/CIs accompanied can descramble the programs input from encrypted RF, ASI and IP. The CAM requires NO unsightly external

power cords, cables, or additional remote control device.

BISS function is also embedded to descramble programs from any input.

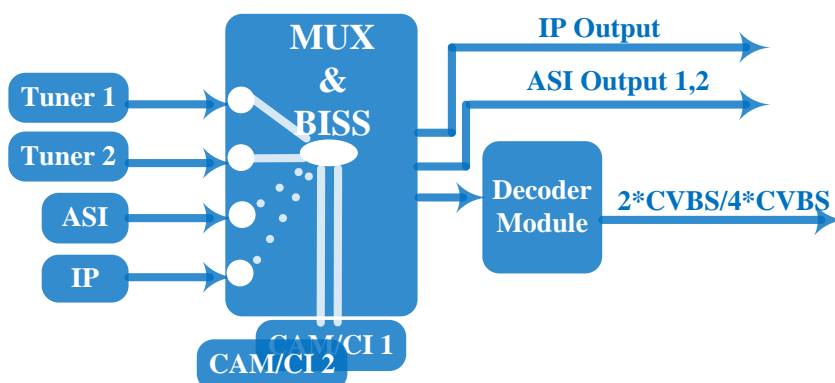
Its pluggable structure design greatly facilitates the change of modules (demodulator or decoder) as needed.

To meet customers' various requirements, NDS356X Series is also equipped with 1 ASI input, and output with 2 ASI out ports and IP port.

## Key Features



- 2 Tuner inputs (DVB-C, T/(T), ISDBT, S/S2/S2X Optional)
- 1 ASI & 1 IP (UDP) input for re-mux
- Separate 2\*CVBS(4\*CVBS optional) video output
- IP (1 MPTS & 8 SPTS) over UDP and RTP/RTSP output; ASI out
- Demodulation + descrambler + decoder modules in one box
- One CAM can decrypt multiple programs from Tuners/ASI/IP
- Support maximum 128 PID mapping per input
- Support BISS descrambling(each BISS module supports up to 60Mbps)
- Pluggable and changeable demodulator and decoder modules
- LCD display, Remote control and Firmware, web NMS management
- Updates via web
- Best quality and breakthrough price

## Principle Chart

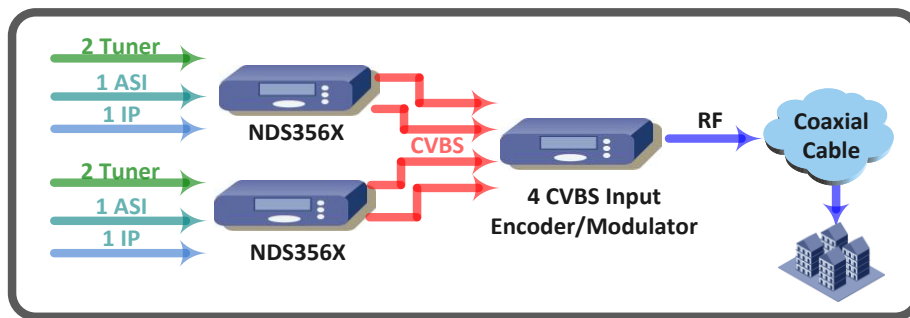


## Technical Specifications

<b>Input</b>	2 *Tuner(DVB-C, T/(T), ISDBT, S/S2/S2X optional), F type					
	1*ASI input for re-mux, BNC interface					
1*IP input for re-mux (UDP)						
<b>Tuner Section</b>	Multi-mode tuners switchable (New)	DVB-C	Input Frequency	60 ~890 MHz		
			Standard	J.83A, J.83C	J.83B	
			Constellation	16/32/64/128/256 QAM	64/256 QAM	
		DVB-T/(T)	Input Frequency	60 ~890 MHz		
			Bandwidth	6/7/8 M		
			ISDB-T	Input Frequency	60 ~890 MHz	
		Version 1	DVB-S	Input Frequency	950~2150MHz	
				Symbol rate	1~45 Msps	
				FEC	1/2, 2/3, 3/4, 5/6, 7/8	
	Constellation			QPSK		
	Signal Strength			- 65~-25dBm		
	Max input bitrate			≤120 Mbps		
	DVB-S2		Input Frequency	950~2150MHz		
			Symbol rate	1~45 Msps		
			FEC	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10		
			Constellation	QPSK, 8PSK		
	Max input bitrate	≤120 Mbps				
	Version 2 (New)	DVB-S	Input Frequency	950~2150MHz		
			Symbol rate	0.5~45Msps		
			Signal Strength	- 65- -25dBm		
			FEC	1/2, 2/3, 3/4, 5/6, 7/8		
			Constellation	QPSK		
			Max input bitrate	≤160 Mbps		
		DVB-S2	Input Frequency	950~2150MHz		
			Symbol rate	QPSK/8PSK /16APSK :0.5~45 Msps 32APSK: 0.5~40Msps;		
			FEC	QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10		
			Constellation	QPSK, 8PSK, 16APSK, 32APSK		
Max input bitrate			≤160 Mbps			
DVB-S2X			Input Frequency	950~2150MHz		
		Symbol rate	QPSK/8PSK /16APSK :0.5~45 Msps 8APSK: 0.5~40Msps 32APSK: 0.5~40Msps			
		FEC	QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 13/45, 9/20, 11/20 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 8APSK: 5/9-L, 26/45-L			

			16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 1/2-L, 8/15-L, 5/9-L, 26/45, 3/5, 3/5-L, 28/45, 23/36, 2/3-L, 25/36, 13/18, 7/9, 77/90 32APSK: 3/4, 4/5, 5/6, 8/9, 2/3-L, 32/45, 11/15, 7/9
		Constellation	QPSK, 8PSK, 8APSK, 16APSK, 32APSK
		Max input bitrate	≤160 Mbps
<b>Descrambling</b>	CAM/CI Quantity	2	
	BISS Mode	Mode 1, Mode E (up to 120Mbps)	
<b>Output</b>	IP (1*MPTS & 8*SPTS) out over UDP, RTP/RTSP. 100Base-T Ethernet interface (unicast / multicast)		
	2×ASI mirrored out, BNC interface		
	<b>2*CVBS optional</b>		
			
	Decode Out	Video Interface: 2xCVBS (RCA) Audio Interface: 2xStereo/4xMono (RCA) Resolution: PAL 576i, NTSC 480i Video Decode: MPEG-2, MPEG-4 AVC/H.264(optional) Audio Decode: MPEG 1 Layer II	
<b>System</b>	<b>4*CVBS optional</b>		
			
	Decode Out	Video Interface: 4xCVBS (RCA) Audio Interface: 4xStereo/8xMono (RCA) Resolution: PAL 576i, NTSC 480i Video Decode: MPEG-2, MPEG-4 AVC/H.264 Audio Decode: MPEG 1 Layer II	
<b>Miscellaneous</b>	Local interface	LCD + control buttons	
	Remote management	Web-server Management	
	Language	English	
	Upgrade	USB, web management	
<b>Miscellaneous</b>	Dimension	482*300*44.5mm (W×L×H)	
	Approx weight	3.5kg	
	Environment	0~45℃(work); -20~80℃ (Storage)	
	Power requirements	100~240VAC, 50/60Hz	
	Power consumption	20W	

## System Connection Sample



### Ordering Guide

NDS356X, 'X' should be interpreted as different digits which indicate tuners of different standard.

- ✓ NDS3561 DVB-C SD IRD
- ✓ NDS3564 DVB-T/(T) SD IRD
- ✓ NDS3565 DVB-S/S2 SD IRD

Multiple decoding boards are optional:

Option 1: 2 A/V output (MPEG-2 Decoding)- NDS356X

Option 2: 2 A/V output (MPEG-2 & MPEG-4 Decoding) – NDS356X-A

Option 3: 4 A/V output (MPEG-2 & MPEG-4 Decoding) – NDS356X-C

Updated Date: 25 June, 2019