



NDS3394C V3

16 or 24 in 1 Mux scrambling QAM Modulator



Outline

NDS3394C v3 is a high performance and cost-effective QAM modulator designed by Dexin. It supports 24 or 16 FTA DVB-S/S2/S2X or DVB-C/T/T2/ISDB-T multi-mode switchable tuner input, maximum 128 IP inputs through DATA1 and 2 TS inputs for re-mux through 2 ASI input ports. After demodulating, multiplexing and QAM modulating, it outputs 16 non-adjacent carriers and 16 IP (MPTS) through DATA2. Two kinds of software for order option, BISS descrambling version (without scrambler feature) or Scrambler version (without BISS descrambling feature). NDS3394C v3 is also characterized with high integrated level, high performance and low cost. This is very adaptable to a new generation CATV broadcasting system.

Key Features

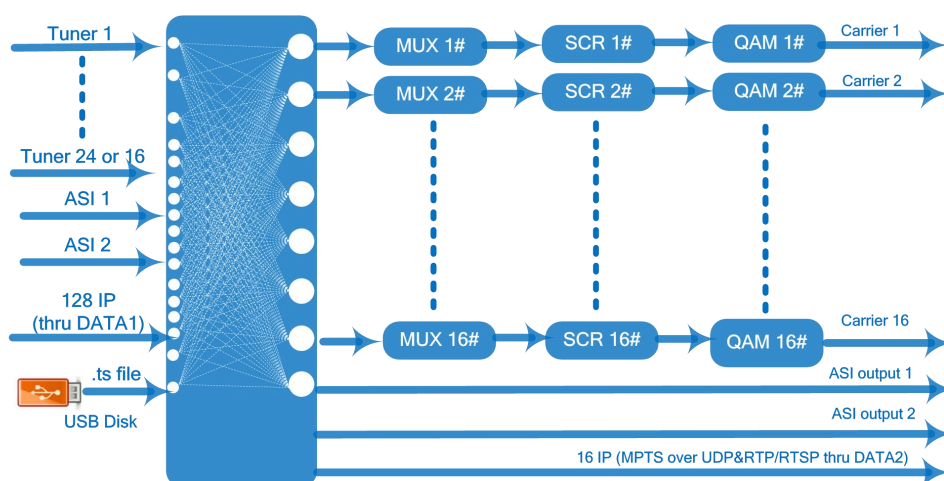
- **24 (or 16) FTA DVB-S/S2/S2X or DVB-C/T/T2/ISDB-T multi-mode switchable Tuner inputs with loop out + 2 ASI inputs+128 IP inputs thru DATA 1 over UDP and RTP protocol, and TS files input by playing via an USB disk (FAT 32, USB 2.0)**
- **BISS descrambling, max 64 BISS Keys per output channel (optional)**
- **16 DVB-C non-adjacent carriers output, within 192MHz bandwidth**

- 16 IP (MPTS) outputs over UDP and RTP/RTSP, as mirror of the carriers
- 2 TS outputs thru ASI out 1 and ASI out 2, as mirror of the 2 chosen carriers
- Support 16 groups multiplexing+16 groups scrambling(optional) +16 groups QAM

modulating

- Excellent RF output performance index, MER≥40db
- Support accurate PCR adjusting
- Support PSI/SI editing and inserting
- Support Web management, Updates via web
- Reboot in Web after firmware upgrading

Working Principle



Specifications

Input	24 or 16 FTA DVB-S/S2/S2X or DVB-C/T/T2/ISDB-T multi-mode switchable tuner inputs as per order		
	128 IP inputs through DATA1 over UDP and RTP protocol		
	2 ASI inputs, BNC interface		
	TS files input by playing via the USB disk (FAT 32, USB 2.0)		
	Tuner option 1	DVB-S	Frequency In
			950~2150MHz
			Symbol rate
			0.5~45Msps
			Signal Strength
			- 65~-25dBm
		DVB-S2	FEC
			1/2, 2/3, 3/4, 5/6, 7/8
		DVB-S2	Constellation
			QPSK
		DVB-S2	Max input bitrate
			≤129 Mbps
		DVB-S2	Frequency In
			950~2150MHz
		DVB-S2	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	≤129 Mbps		
			DVB-S2X	Frequency In	950-2150MHz	
				Symbol rate	QPSK/8PSK /16APSK: 0.5~45 Msps 8APSK/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, 9/10, 2/3-L, 32/45, 11/15, 7/9	
		Constellation		QPSK, 8PSK, 8APSK, 16APSK, 32APSK		
		Max input bitrate	≤129 Mbps			
		Tuner option 2	DVB-C	Standard	J.83A(DVB-C), J.83B, J.83C	
				Frequency In	50~960MHz	
	Constellation			16/32/64/128/256 QAM		
	DVB-T/T2		Frequency In	50~960MHz		
			Bandwidth	6/7/8 M bandwidth		
	ISDB-T	Frequency In	50~960MHz			
Multiplexing	Max PID Remapping		256 outputs per channel			
	Function	PID remapping (automatically or manually)/CA Filter				
		A/V PID Filter				
		Accurate PCR adjusting				
		Generate PSI/SI table automatically				
Scrambling Parameters (optional)	Max simulscript CA		4			
	Scramble Standard		ETR289, ETSI 101 197, ETSI 103 197			
	Connection		Local/remote connection			
Modulation	QAM Channel		16 non-adjacent carriers output, within 192MHz bandwidth			
	Standard		EN300 429/ITU-T J.83A/B			
	MER		≥40db			
	RF frequency		50~960MHz, 1KHz step			
	RF output level		-20~+3dbm(87~110 dbμV),0.1db step			
	Symbol Rate		3600ksps~6952ksps, 1ksps stepping			
			J.83A	J.83B		
	Constellation		16/32/64/128/256QAM	64/256 QAM		
	Bandwidth		8M	6M		

Stream out	16 carriers output (F type interface)	
	16 IP (MPTS) output over UDP and RTP/RTSP (thru DATA 2), 2 ASI outputs(2 TS as mirror)	
System	Network management (WEB)	
	Chinese and English language	
	Ethernet software upgrade	
General	Dimension (W*D*H)	482mm×270mm×44mm
	Temperature	0~45℃(Operation) ; -20~80℃(Storage)
	Power	AC 100V±10%50/60Hz; AC 220V±10%, 50/60HZ

Major Technical Comparison

NDS3394C	v1	v2	v3
LCD/KEY Feature	NO	NO	Yes
ASI inputs	2	1	2
ASI outputs	NO	2 for one TS	2 for two TS
Tuner inputs	16	16 or 24	16 or 24 (FTA DVB-S/S2/S2X or DVB-C/T/T2/ISDB-T multi-mode switchable Tuner inputs with loop out)
RF loop out	Yes	No	Yes
IP outputs	1 MPTS output	16 MPTS output	16 MPTS output
USB	N/A	Playing TS	Playing TS
DATA Ports	IP inputs/outputs via GE1	IP inputs via DATA 1 IP outputs via DATA 2	IP inputs via DATA 1 IP outputs via DATA2
Reboot in Web after firmware upgrading	N/A	N/A	Yes

The other differences are existing in Web GUI design and chassis design etc, no further description here.