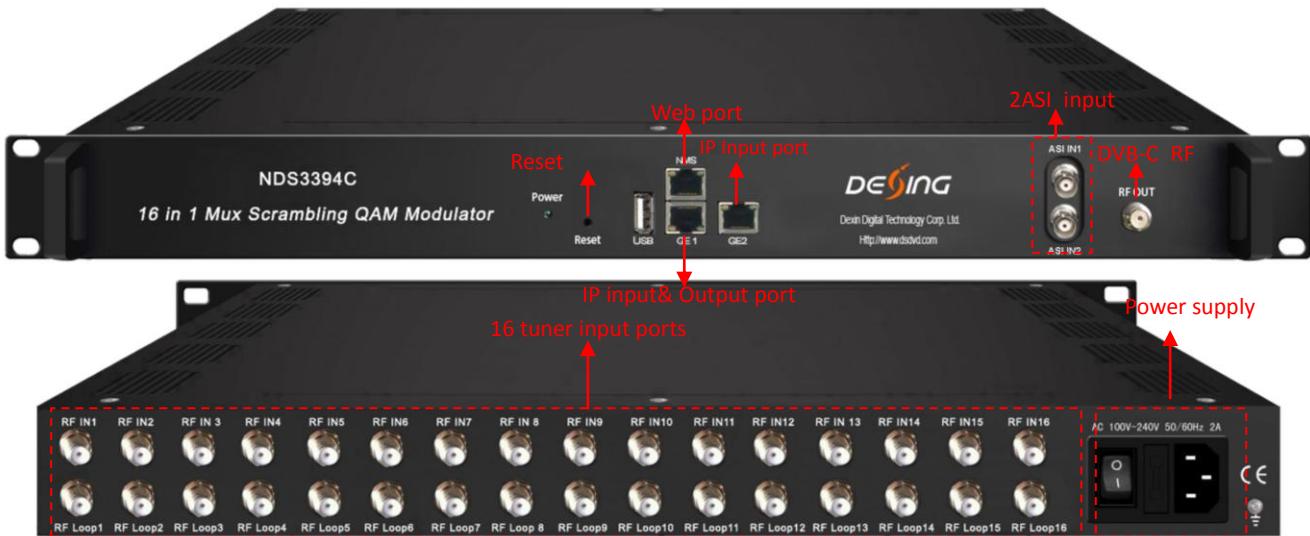




NDS3394C

16 in 1 Mux scrambling QAM Modulator



Outline

NDS3394C is a high performance and cost-effective QAM modulator designed by Dexin. It supports 16 DVB-C (DVB-T/-T)/-S/-S2/S2X, ATSC, ISDB-T Optional) FTA tuner input, maximum 512 IP input through GE1 and TS input for re-mux through 2 ASI ports. After multiplexing, scrambling and QAM modulating, it gives 16 non-adjacent carriers output and 1 IP (MPTS) output through GE1.

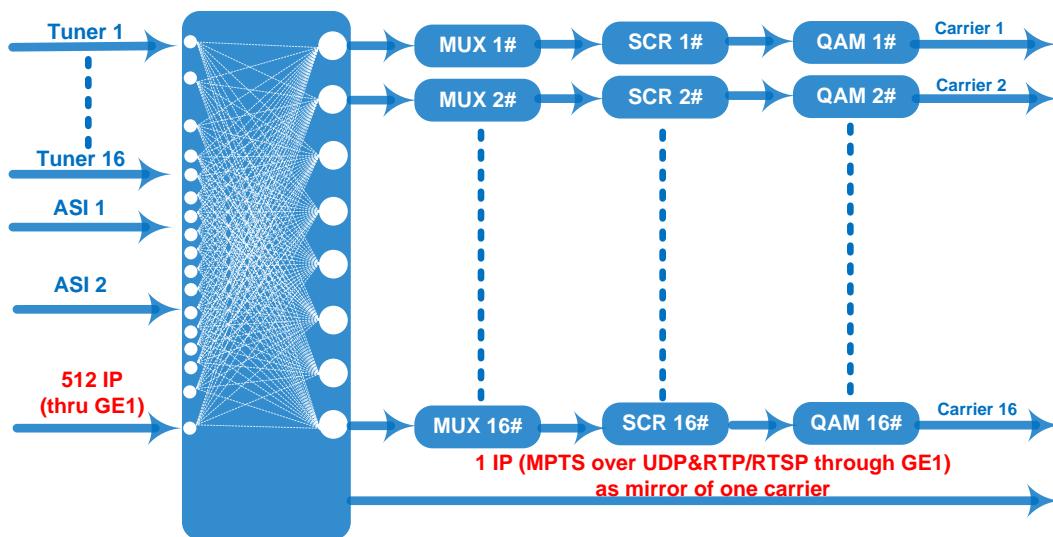
NDS3394C is also characterized with high integrated level, high performance and low cost. It supports dual power supply (optional). This is very adaptable to newly generation CATV broadcasting system.

Key Features

- **16 DVB-C (DVB-T/-T)/-S/-S2/S2X, ATSC, ISDB-T Optional) FTA Tuner + 2 ASI input+512 IP input thru GE1 over UDP and RTP protocol**
- **16*DVB-C RF output**

- 1 IP (MPTS) output over UDP and RTP/RTSP, as mirror of one carrier
- Support 16 groups multiplexing+16 groups scrambling +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
- Redundancy Power Supply (optional)

Working Principle



Specifications

Input	16 DVB-C (DVB-T/-T)/-S/-S2/-S2X, ATSC, ISDB-T Optional) FTA Tuner			
	512 IP input through GE1 over UDP and RTP protocol			
	2 ASI input, BNC interface			
Tuner Section	Multi-mod e tuners switchable (New)	DVB-C	Standard	J.83A(DVB-C), J.83B, J.83C
			Frequency In	60~890MHz
			Constellation	16/32/64/128/256 QAM
		DVB-T/(T)	Frequency In	60~890MHz
			Bandwidth	6/7/8 M bandwidth
	Version 1	ISDB-T	Frequency In	60~890MHz
		DVB-S/S2	Frequency In	950~2150MHz
			Symbol rate	QPSK 1~45Mbauds 8PSK 1~45Mbauds
			Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
			Constellation	QPSK, 8PSK

Version 2 (New)	DVB-S	Frequency In	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	≤129 Mbps
	DVB-S2	Frequency In	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
	DVB-S2X	Max input bitrate	≤129 Mbps
		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
	ATSC	Frequency In	30~1000MHz
		Bandwidth	6M
		Constellation	8VSB
Multiplexing	Maximum PID Remapping		360 output per channel
	Function		PID remapping (automatically or manually)
			Accurate PCR adjusting
			Generate PSI/SI table automatically
Scrambling Parameters	Max simulcrypt CA		4
	Scramble Standard		ETR289, ETSI 101 197, ETSI 103 197
	Connection		Local/remote connection
Modulation	QAM Channel		16 non-adjacent carriers output
	Standard		EN300 429/ITU-T J.83A/B

	MER	$\geq 40\text{db}$
	RF frequency	50~960MHz, 1KHz step
	RF output level	-20~+10dbm(87~107 dB μ V),0.1db step
	Symbol Rate	5.0Msps~7.0Msps, 1ksps stepping
		J.83A J.83B
	Constellation	16/32/64/128/256QAM 64/256 QAM
	Bandwidth	8M 6M
Stream out	16 RF output (F type interface)	
	1 IP (MPTS) output over UDP and RTP/RTSP (GE1 only), as mirror of one carrier	
System	Network management (WEB)	
	Chinese and English language	
	Ethernet software upgrade	
General	Dimension(W*D*H)	482mm×300mm×44.5mm
	Temperature	0~45°C(Operation) ; -20~80°C(Storage)
	Power	AC 100V±10% / 60Hz; AC 220V±10%, 50/60HZ