

SFT3343D 4 in 1 QAM Modulator



Version 1

Version 2

Outline

SFT3343D is a high performance and cost-effective mux-scrambling QAM modulator designed by SOFTEL. It has multiple input ports optional. After multiplexing, scrambling and QAM modulating process, then it gives 4 RF output. To meet customers' various requirements, this device is also equipped with IP port to output 4 MPTS over UDP. Its pluggable structure design greatly facilitates the change of modules (demodulator) as needed.

The four CAMs/CIs (Optional) accompanied and BISS modules can descramble the programs input from 4 Tuner inputs. Its pluggable structure design greatly facilitates the change of modules (demodulator) as needed. SFT3343D is also characterized with high

integrated level, high performance and low cost. This is very adaptable to newly generation CATV broadcasting system.

Key Features

- **Multiple Input ports optional:**

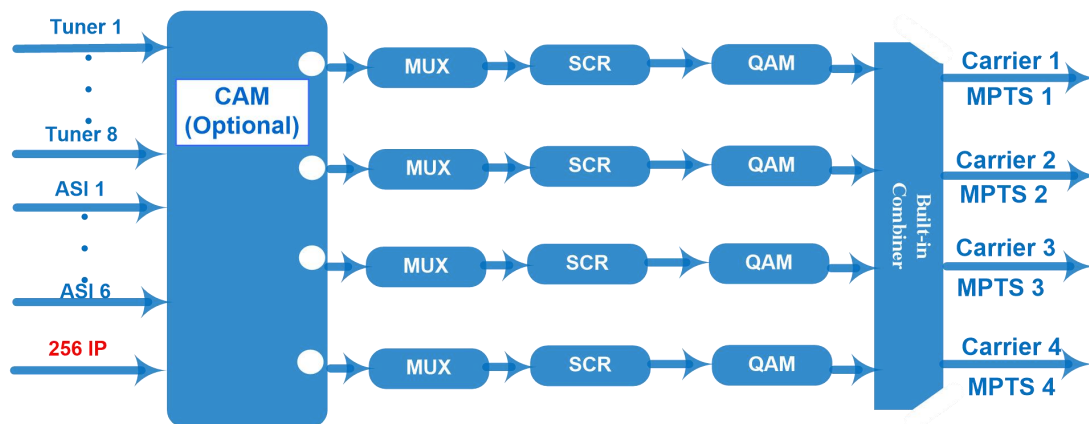
8 DVB-C/T/T2/ISDBT/S/S2/S2X/ATSC FTA Tuner + 6 ASI input ports+256 IP input

(Version 1)

4 DVB-C/S/S2/ATSC Tuner with CAM+6 ASI input ports (Version 2)

- Support 4 channels multiplexing+4 channels scrambling+4 channels QAM modulating
- Fully support DVB-C (EN300 429) and ITU-T J.83A/B/C
- Fully support DVB general scrambling system description ETR289, simulcrypt standard ETSI 101 197 and ETSI 103 197
- Support accurate PCR adjusting
- Support PSI/SI editing and inserting
- Excellent RF output performance index, MER≥40db
- Support 4*MPTS output over UDP
- **4 CAM decrypt multiple programs from 4 Tuner input (Optional)**
- **Support BISS descrambling(only for Version 2)**
- Support LCD display and keyboard
- Support Web management, Updates via web and USB

Working Principle



Specifications

Input	8 DVB-C/T/T2/ISDBT/S/S2/S2X/ATSC FTA Tuner + 6 ASI input+256 IP input -----Version 1				
	4 DVB-C/S/S2/ATSC Tuner with CAM + 6 ASI -----Version 2				
Tuner Section	For Version 1: Multi-mode tuners switchable (New Type)	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/T2	Input Frequency	60 ~890 MHz	
			Bandwidth	5/6/7/8 M	
		ISDB-T	Input Frequency	60 ~890 MHz	
	For Version 1 (New Type)	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	≤120 Mbps	
		DVB-S2X	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	≤120 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	≤120 Mbps	
		DVB-C	Standard	J.83A(DVB-C), J.83B, J.83C	
			Input Frequency	30~1000Mhz	

			Constellation	16/32/64/128/256 QAM	
		DVB-S	Input Frequency	950~2150MHz	
			Symbol rate	2~45Msps	
			FEC	1/2, 2/3, 3/4, 5/6, 7/8	
			Signal Strength	-65~-25dBm	
			Constellation	QPSK	
		DVB-S2	Input Frequency	950~2150MHz	
			Symbol rate	QPSK/8PSK 1~45 Msps	
			FEC	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10	
			Constellation	QPSK, 8PSK	
	ATSC	Input Frequency	54~858MHz		
		Bandwidth	6M		
		Constellation	8VSB		
Multiplexing	Maximum PID Remapping	128per input channel			
	Function	PID remapping (automatically or manually)			
		Accurate PCR adjusting			
		Generate PSI/SI table automatically			
Scrambling	Maximum simulcrypt CA	4			
	Standard	ETSI 101 197, ETSI 103 197			
	Connection	Local/remote connection			
Modulation	QAM Channel	4			
	Standard	EN300 429/ITU-T J.83A/B/C			
	MER	≥40db			
	RF frequency	30~999MHz, 1KHz step			
	RF output level	-10~0dbm,0.1db step -----Version 1 -20~0dbm,0.1db step -----Version 2			
	Symbol Rate	5.0Msps~9.0Msps, 1ksps stepping			
		J.83A	J.83B	J.83C	
	Constellation	16/32/64/128/256QAM	64/256 QAM	64/256 QAM	
	Bandwidth	8M	6M	6M	
	System	Local interface	LCD + control buttons		
Remote management		Web NMS			
Stream Out		4*MPTS over UDP out (RJ45, 1000M, Unicast/Multicast)			
Language		English and Chinese			
Software Upgrading		Web and USB			
General	Dimension (W*D*H)	482mm×300mm×44.5mm			
	Temperature	0~45℃ (Operation) ; -20~80℃ (Storage)			
	Power	AC 100V±1050/60Hz; AC 220V±10%, 50/60HZ			