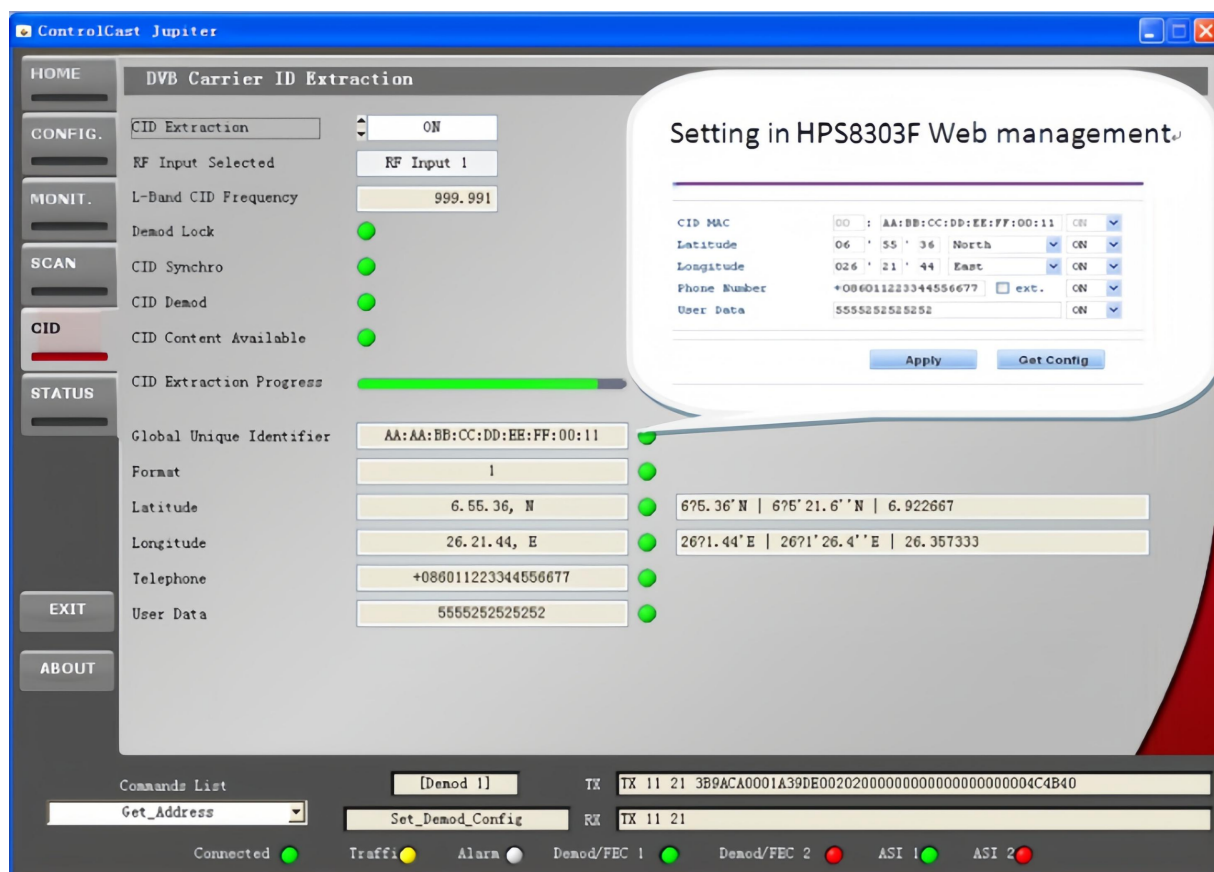




DVB-S2/S2X Modulator



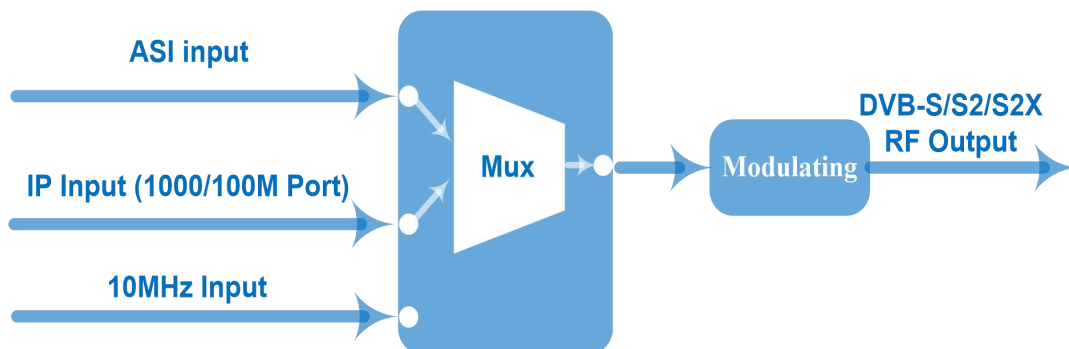
Outline

CATCAST HPS8303F is a high-performance modulator developed according to DVB-S2X (EN302 307-2) standard which is the standard of third generation of the European broadband satellite telecommunication. It is to convert the input ASI and IP signals alternatively into digital DVB-S/S2/S2X RF output. BISS scrambling mode is inserted to this DVB-S2X modulator, which helps to safely distribute your programs. It is easy to reach local and remote control with NMS software and LCD in the front panel. With its high cost-effective design, CATCAST HPS8303F DVB-S2X modulator is wildly used for broadcasting, interactive services, news gathering and other broadband satellite applications.

Features

- Fully complying with DVB-S (EN300 421), DVB-S2 (EN302 307) and DVB-S2X (EN 302 307-2) standard
- 4 ASI inputs supporting backup (3 for backup) and 1 IP (1000/100M) signal input for re-mux
- QPSK, 8PSK, 8APSK, 16APSK, 32APSK Constellations
- Support RF CID setting
- Constant temperature crystal oscillator, as high as 0.1ppm stability
- Support coupling 10Mhz clock output through RF output port
- Support 24V power output through RF output port
- Support BISS scrambling
- Support local and remote control with Web-server NMS
- Support SFN TS transmission

Principle Chart



Specifications

ASI Input	Supporting both188/204 Byte Packet TS Input			
	4 ASI Inputs, Supporting Backup			
	Connector: BNC, Impedance 75Ω			
IP Input	1*IP Input (RJ45, 1000/100M TS Over UDP)			
10MHz Input	1*10MHz Input (BNC Interface)			
Multiplexing	Maximum PID Remapping		128 input per channel	
	Function	PID remapping (automatically or manually)		
		Accurate PCR adjusting		
		Edit PSI/SI tables (PAT/PMT/SDT/CAT/NIT)		
RF Output	RF Range: 950 ~ 2150 MHz, 10KHz step			
	Output Level Attenuation: -27.5 dBm~-1.5 dBm, 0.5dB Step			
	MER≥40dB			
	Connector: N type, impedance 50Ω			
Channel Coding and Modulation	Standard	DVB-S	DVB-S2	DVB-S2X
	Outer coding	RS Coding	BCH Coding	BCH Coding
	Inner coding	Convolution	LDPC Coding	LDPC Coding
	Constellation	QPSK	QPSK,8PSK, 16APSK,32APSK	QPSK,8PSK, 8APSK, 16APSK, 32APSK
	FEC/ Convolution Rate	1/2, 2/3, 3/4, 5/6, 7/8	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	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 , 23/36, 25/36, 13/18 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
	Roll-off Factor	0.2,0.25,0.35	0.2, 0.25, 0.35	0.05, 0.10, 0.15, 0.2, 0.25, 0.35
	Symbol Rate	0.05~45Msps	0.05~40Msps (32APSK); 0.05~45Msps (QPSK/8PSK/16APSK)	0.05~40Msps (8APSK /32APSK) 0.05~45 Msps (8PSK/QPSK/16APSK)
BISS Scramble	Mode 1, Mode E, Mode 0			
System	Web-server NMS			

	Language: English	
	Ethernet software upgrade	
	24V power output through RF output port	
Miscellaneous	Dimension	482mm×410mm×44mm
	Temperature	0~45°C(operation), -20~80°C (storage)
	Power	100-240VAC±10%,50Hz-60Hz