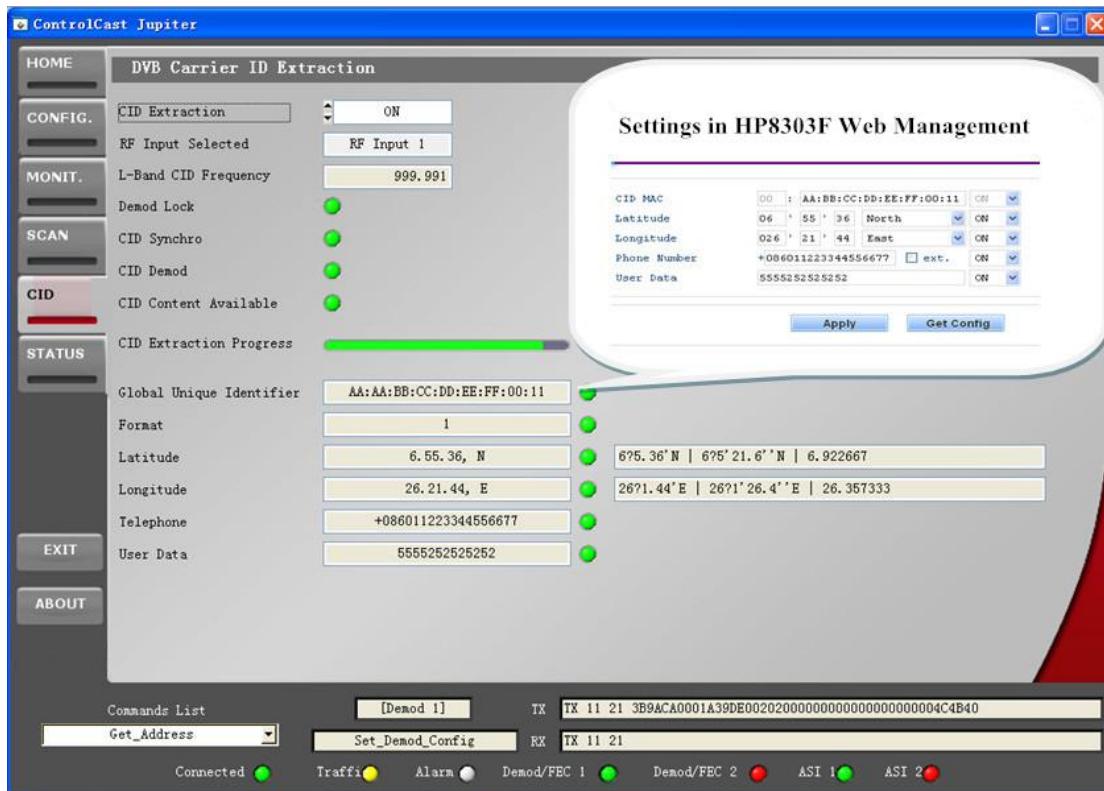


## HP8303F DVB-S2X IF Modulator





## Outline

HP8303F 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 IF 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.

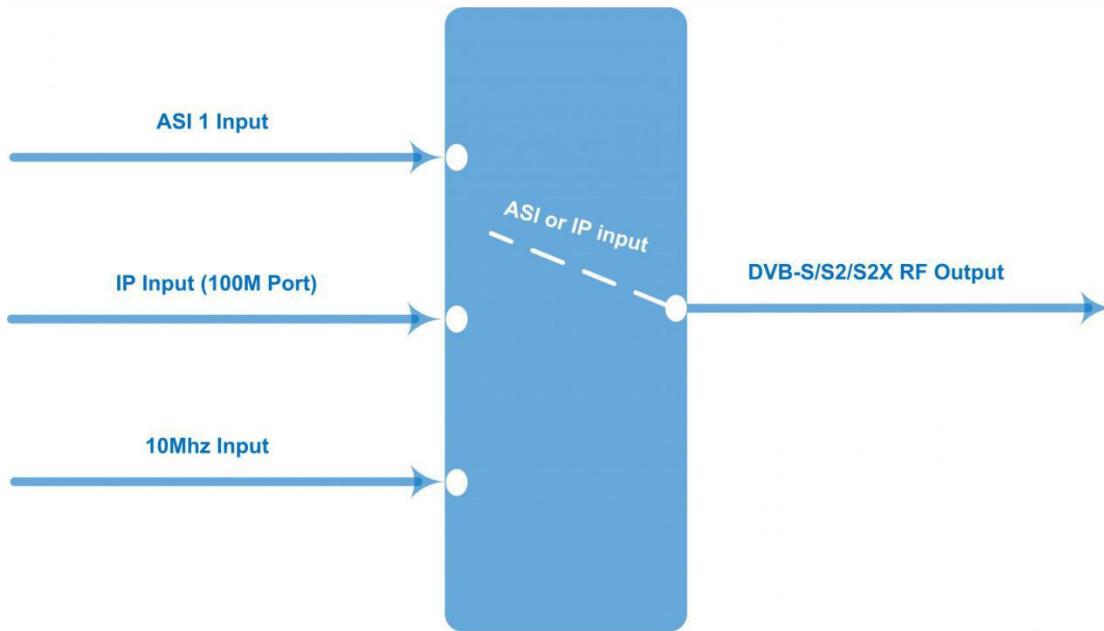
With its high cost-effective design, HP8303F DVB-S2X IF modulator is wildly used for broadcasting, interactive services, news gathering and other broadband satellite applications.

## Features

- \* Fully complying with DVB-S (EN300 421), DVB-S2 (EN302 307-1) and DVB-S2X (EN 302 307-2) standard
- \* 4 ASI inputs supporting hot backup (3 for backup)
- \* Support IP (100M) signal input
- \* QPSK, 8PSK, 16APSK, 32APSK, 8PSK-L, 16APSK-L, 32APSK-L Constellations
- \* Support RF CID setting
- \* Constant temperature crystal oscillator, as high as 0.1ppm stability
- \* 10MHz outer reference clock output

- \* Support BISS scrambling
- \* Support local and remote control with Web-server NMS
- \* Output frequency range: 50~960MHz, 1KHz stepping

## Principle Chart



## Specifications

<b>ASI Input</b>	Supporting both 188/204 Byte Packet TS Input
	4 ASI Inputs ( 3 ASI for hot backup)
	Connector: BNC, Impedance 75Ω
<b>IP Input</b>	1*IP Input (Rj45, 100M TS Over UDP)
<b>10MHz Input</b>	1*10Mhz Input (BNC Interface)
<b>IF Output</b>	Range:50 ~ 960 MHz, 1KHz stepping
	Output Level Attenuation: -28.5dBm~+3 dBm, 0.5dB Stepping
	MER≥40dB
	Connector: N type, impedance 50Ω

	Standard	DVB-S	DVB-S2	DVB-S2X
<b>Channel Coding and Modulation</b>	Outer coding	RS Coding	BCH Coding	BCH Coding
	Inner coding	Convolution	LDPC Coding	LDPC Coding
	Constellation	QPSK	QPSK,8PSK, <b>16APSK,32APSK</b>	QPSK,8PSK, 16APSK,32APSK <b>8PSK-L,16APSK-L,32APSK-L</b>
	FEC/ Convolution Rate	1/2, 2/3, 3/4, 5/6, 7/8	<b>QPSK:</b> 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 <b>8PSK:</b> 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 <b>16APSK:</b> 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 <b>32APSK:</b> 3/4, 4/5, 5/6, 8/9, 9/10	<b>QPSK:</b> 13/45, 9/20, 11/20 <b>8PSK:</b> 23/36, 25/36, 13/18 <b>16APSK:</b> 26/45, 3/5, 28/45, 23/36, 25/36, 13/18, 7/9, 77/90 <b>32APSK:</b> 32/45, 11/15, 7/9 <b>8PSK-L:</b> 5/9, 26/45 <b>16APSK-L:</b> 5/9, 8/15, 1/2, 3/5, 2/3 <b>32APSK-L:</b> 2/3
	Roll-off Factor	0.2,0.25,0.35	0.2, 0.25, 0.35	0.05, 0.10, 0.15
	Symbol Rate	0.5~45Msps	0.5~40Msps (32APSK); 0.5~45Msps (16APSK/8PSK/QPSK)	0.5~40Msps(32APSK,32APSK-L); 0.5~45 Msps (16APSK/8PSK/QPSK/16APSK-L/8PS K-L)
	BISS Scramble	Mode 0, mode 1, mode E		
	System	Web-server NMS, Ethernet software upgrade		
Language: English				