



The ADV-8501 is a high quality professional, cost-effective DVB-S/S2/S2X modulator designed for broadcast contribution, DSNG and distribution applications over satellite and microwave links. It supports DVB-S2X (EN302 307-2) standard - the standard of third generation of the European broadband satellite telecommunication.

ADV-8501 is equipped with IP input and 4 ASI inputs (3 for hot backup).

It outputs L-band RF in the range of 950 - 2150MHz (optionally IF output: 50-960 MHz).

ADV-8501's features also include BISS scrambler, 10MHz input/output reference clock, built-in power supply for the BUC (Block Up Converter) and more.

ADV-8501 adopts user-friendly web-based operation interface to effectively manage the device.

With its high performance ADV-8501 DVB-S/S2/S2X modulator is widely used for broadcasting, interactive services, news gathering and other broadband satellite applications.

Applications

- **Digital satellite Uplinks for Distribution, Contribution, DSNG /ENG Mobile news gathering**
- **Digital Microwave Links (Mobile and STL)**

Features

- Supports DVB-S2 (EN302307), DVB-S (EN300421) and DVB-S2X (EN 302 307-2) standards
- 4 ASI inputs supporting hot backup (3 for backup); IP (100M) input
- QPSK, 8PSK, 16APSK, 32APSK, 8PSK-L, 16APSK-L, 32APSK-L Constellations
- RF CID setting
- Constant temperature 10MHZ internal crystal oscillator with 0.1ppm stability
- External 10 MHz reference input
- 10MHz reference clock output
- Built-in 24V power supply for BUC
- BISS scrambling
- Supports local and remote control via front panel or web
- RF Output frequency range: 950~2150MHz with 10KHz step
- Optionally: IF Output frequency range: 50~960MHz with 1KHz step

Specifications

ASI Input	Supports both 188/204 Byte Packet TS Input
	4 ASI Inputs, Supports Hot Backup
	Connector: BNC, Impedance 75Ω
IP Input	1*IP Input (Rj45, 100M TS Over UDP)
10MHz Input	1*10Mhz Input (BNC Interface)
RF Output	RF Range: 950 ~ 2150 MHz, 10KHz step
	Output Level setting: -27.5 dBm ~ -1.5 dBm, 0.5dB Step
	MER≥40dB
	Connector: N type, impedance 50Ω
IF Output (Optional)	Range: 50 ~ 960 MHz, 1KHz step
	Output Level setting: -28.5dBm ~ +3 dBm, 0.5dB Step
	MER≥40dB
	Connector: N type, impedance 50Ω

	Standard	DVB-S	DVB-S2	DVB-S2X
Channel Coding and Modulation	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 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 (16APSK/8PSK/QPSK)	0.05~40Msps (8APSK, 32APSK); 0.05~45 Msps (16APSK/8PSK/QPSK)
	BISS Scramble	Mode 0, mode 1, mode E		
System	Web-server NMS			
	Ethernet software upgrade			
	24V power output through RF output port			
Miscellaneous	Dimension	482mm×410mm×44mm		
	Weight	4.3 KG		
	Temperature	0~45°C (operation), -20~80°C (storage)		
	Power	100-240VAC±10%,50Hz-60Hz		
	Consumption	25W		

Ordering Info

ADV-8501 - DVB-S/S2/S2X Modulator with RF (L-band) output

ADV-8501-F - DVB-S/S2/S2X Modulator with IF output