

BM8121

DVB-S2 Modulator



DESCRIPTION

The BM8121 DVB-S2 Modulator is a high-performance modulator developed according to DVB-S2 (EN302307) standard which is the standard of second generation of the European Broadband Satellite Telecommunication. It allows to convert the input ASI and IP signals alternatively into digital DVB-S/S2 RF output. BISS scrambling mode is inserted to this DVB-S2 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, this DVB-S2 modulator is widely used for broadcasting, interactive services, news gathering and other broadband satellite applications.

SPECIFICATION

ASI Input

Supporting both 188/204 Byte Packet TS Input
4 ASI Inputs, Supporting Hot Backup
Connector BNC, Impedance 75Ω

IP Input

1xIP Input (RJ45, 100 Mbps TS Over UDP)

SFN Output

MIP or IIP

10 MHz Input

1x10 MHz Input (BNC Interface)

RF Output

RF Range	950 ~ 2150 MHz, 10KHz stepping
Output Level Attenuation	-10.0 dBm ~ -41.5 dBm, 0.5dB Stepping
MER	≥ 36dB
Connector	N type, Impedance 50Ω

FEATURES

- Fully complying with DVB-S2 (EN302307) and DVB-S (EN300421) standard
- 4 ASI inputs supporting hot backup (3 for backup)
- Support IP (100 Mbps) signal input
- QPSK, 8PSK, 16APSK, 32APSK constellations
- 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 (Up to 80 Mbps)
- Support local and remote control with SNMP or Web-Server NMS
- Support SFN TS (with MIP or IIP) transmission
- Output frequency range: 950 ~ 2150 MHz, 10 KHz stepping

Channel Coding and Modulation

	DVB-S	DVB-S2
Outer Coding	RS Coding	BCH Coding
Inner Coding	Convolution	LDPC Coding
Constellation	QPSK	QPSK, 8PSK, 16APSK, 32APSK
FEC	1/2, 2/3, 3/4, 5/6, 7/8	QPSK: 1/4,1/3,2/5,1/2,3/5,2/3,3/4, 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
Roll-Off Factor	0,2, 0.25, 0.35	0,2, 0.25, 0.35
Symbol Rate	0.5 ~ 45 Mbps	8PSK / QPSK: 0.05 ~ 45 Mbps 16 / 32 APSK: 0.05 ~ 40 Mbps
BISS Scramble		Mode 0, Mode 1, Mode E

System

24V power output through RF output port	
SNMP/Web-Server NMS	
Ethernet software upgrading	
Dimensions (WxLxH)	482mm x 410mm x 44mm
Weight	4.3 kg
Temperature	0~45°C (Operation); -20~80°C (Storage)
Power	AC 110V / 220V ±10%, 50/60Hz
Consumption	25W