QPSK6350 Plus

Professional DVB-S/S2/S2X Modulator

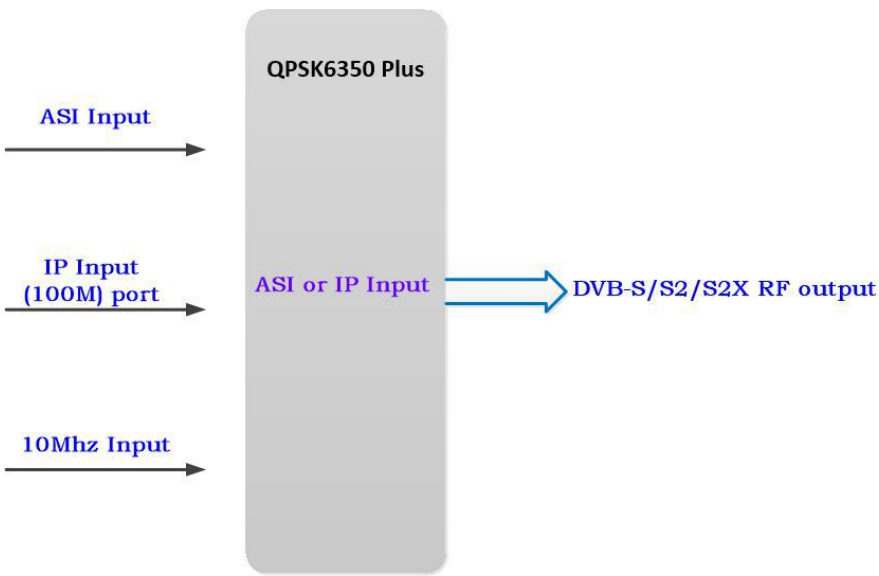
QPSK6350 Plus is a high performance professional DVB-S/S2/S2X modulator, which complies with DVB-S2X (EN302 307-2) standard and is backwards-compatible with DVB-S/S2 modulation standard. It adopts advanced framing structure, channel coding and modulation technology, which convert the input ASI and IP signals alternatively into digital DVB-S/S2/S2X RF output.

As a modulator, it is best suited for Broadcast Direct-To-Home, Primary Distribution to Head-Ends and Contribution of Television and Radio Content. QPSK6350 Plus can be used in conjunction with set-top boxes, professional IRD's or professional satellite demodulators, which helps to safely distribute your programs.

Features

- 4 ASI inputs supporting hot backup (3 for backup)
- Support IP (100M) signal input
- DVB-S2X compliant with EN 302 307-2; DVB-S2 compliant with EN 302 307-1; DVB-S compliant with EN 300 421
- QPSK, 8PSK, 16APSK, 32APSK, 8PSK-L, 16APSK-L, 32APSK-L Constellations
- Carrier Identification System (DVB-CID) support compliant with ETSI 103 129
- Constant temperature crystal oscillator, as high as 0.1ppm stability
- Support coupling 10Mhz clock output through RF output port
- BISS scrambling
- Support local and remote control with SNMP or Web-server NMS management
- Support SFN TS (with MIP or IIP) transmission
- 24V power output through RF output port
- 50 MHz to 960 MHz IF output or 950 MHz to 2150 MHzL-Band output, in 1Khz steps

Principle Chart



Application

- Digital satellite Uplinks for Distribution, Contribution
- Broadcasting, Interactive Services, News Gathering
- Other Broadband satellite applications

Technical Specifications

Input

ASI Input	Supporting both188/204 Byte Packet TS Input 4 ASI Inputs, Supporting Hot Backup
Connector	BNC, Impedance 75Ω
IP Input	1*IP Input (Rj45, 100M TS Over UDP) (option)
10MHz Input	1*10Mhz Input (BNC Interface)

Output

SFN output	MIP or IIP (option)
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
IF Output (optional)	
Range	50 ~ 960 MHz, 1KHz stepping
Output Level Attenuation	-28.5dBm~+3 dBm, 0.5dB Stepping
	MER≥40dB
Connector:	N type, impedance 50Ω

Channel Coding and Modulation

DVB-S	
Outer coding	RS Coding
Inner coding	Convolution
Constellation	QPSK
FEC/ Convolution Rate	1/2, 2/3, 3/4, 5/6, 7/8
Roll-off Factor	0.2, 0.25, 0.35
Symbol Rate	0.5 ~ 45Msps
BISS Scramble	Mode 0, mode 1, mode E
DVB-S2	
Outer coding	BCH Coding
Inner coding	LDPC Coding
Constellation	QPSK,8PSK, 16APSK,32APSK
FEC/ Convolution Rate	
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
Symbol Rate	0.5 ~ 40Msps (32APSK)
	0.5~ 45 Msps (16APSK/8PSK/QPSK)
BISS Scramble	Mode 0, mode 1, mode E
DVB-S2X	
Outer coding	BCH Coding
Inner coding	LDPC Coding
Constellation	QPSK, 8PSK, 16APSK, 32APSK, 16APSK-L, 32APSK-L
FEC/ Convolution Rate	
QPSK	13/45, 9/20, 11/20
8PSK	23/36, 25/36, 13/18
16APSK	26/45, 3/5, 28/45, 23/36, 25/36, 13/18, 7/9, 77/90
32APSK	32/45, 11/15, 7/9
8PSK-L	5/9, 26/45
16APSK-L	5/9, 8/15, 1/2, 3/5, 2/3
32APSK-L	2/3
Roll-off Factor	0.05, 0.10, 0.15
Symbol Rate	
	0.5~40Msps (32APSK,32APSK-L); 0.5~45 Msps (16APSK/8PSK/QPSK/16APSK-L/8PSK-L)
BISS Scramble	Mode 0, mode 1, mode E

Control

	SNMP/Web-server NMS
	Language: English
	Ethernet software upgrade
	24V power output through RF output port

Environment

Power	100-240VAC±10%, 50Hz-60H
Consumption	25W
Temperature	0 ~ 45℃ (operation), -20 ~ 80℃ (storage)
Dimensions	482mm×410mm×44mm
Weight	4.3 kg

