

QPSK6350

Professional DVB-S/S2 Modulator

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QPSK6350 is a high performance professional DVB-S/S2 modulator, which complies with DVB-S2 (EN302307) standard and is backwards-compatible with DVB-S (EN300421) modulation standard. It adopts advanced framing structure, channel coding and modulation technology, increasing over 50% transmission ability more than DVB-S modulator under the same transmission condition and also providing a more powerful receiving ability in the same spectral efficiency. It widely applications to DSNG and DVB-S/S2 network transmission.

The modulator support L-band (RF:950-2150MHz) out. Two inputs are available in order to feed the Modulator, 4 ASI interfaces or FTA DVB-S2/S2X Tuner, capable of near seamless switching, 100M/1GbE interface input for MPEG TS over IP.

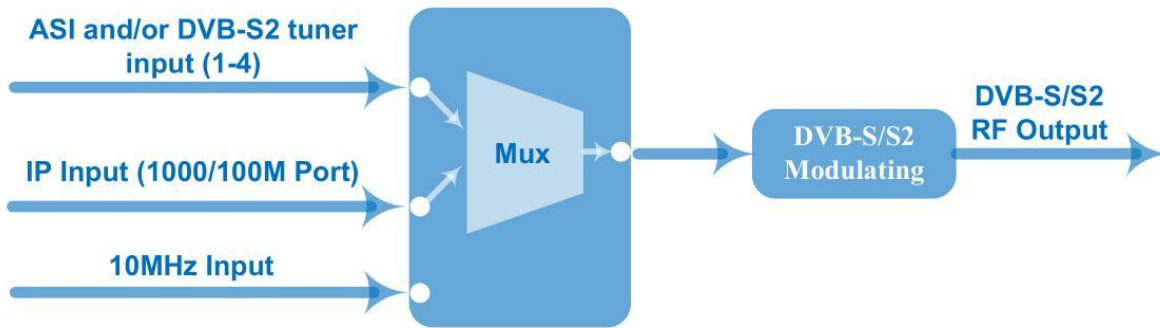
Features

- Fully complying with DVB-S2 (EN302307) and DVB-S (EN300421) standard
- Support IP (100M/1000M) signal input
- ASI and/or DVB-S2/S2X inputs for re-mux or pass through (4 ports for ASI and S2/S2X tuner input combination)
- 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 RF CID setting (Optional as per order)
- Support 24V power output through RF output port, coupling 24V/4A power (option)
- Support BISS scrambling
- Support local and remote control with Web-server NMS
- Support SFN TS (with MIP or IIP) transmission (option)
- Output frequency range: 950~2150MHz, 10KHz stepping
- passed the EU CE&RoHS certification

Application

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

Principle Chart



Technical Specifications

Input

ASI Input	Supporting both 188/204 Byte Packet TS Input 1-4 ASI Inputs
Connector	BNC, Impedance, 75Ω
IP Input	1*IP Input (RJ45, 1000/100M TS Over UDP)

Tuner Input (0-4 inputs optional)

DVB-S	Input Frequency: 950~2150MHz Symbol rate: 0.5~45Msps Signal Strength: -65~-25dBm FEC: 1/2, 2/3, 3/4, 5/6, 7/8 Constellation: QPSK Max input bitrate: ≤160 Mbps
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DVB-S2	Input Frequency: 950~2150MHz Symbol rate: QPSK/8PSK /16APSK :0.5~45 Msps 32APSK: 0.5~40Msps FEC: 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 Constellation: QPSK, 8PSK, 16APSK, 32APSK Max input bitrate: ≤160 Mbps
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DVB-S2X	Input Frequency: 950~2150MHz Symbol rate: QPSK/8PSK /16APSK :0.5~45 Msps 8APSK/32APSK: 0.5~40Msps FEC: 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 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, 2/3-L, 32/45, 11/15, 7/9 Constellation: QPSK/8PSK/8APSK/16APSK/32APSK Max input bitrate: ≤160 Mbps
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Multiplexing

Maximum PID Remapping Function	128 input per channel PID remapping (automatically or manually) Accurate PCR adjusting Edit PSI/SI tables (PAT/PMT/SDT/CAT/NIT)
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Output

RF Output	RF Range: 950 ~ 2150 MHz, 10KHz stepping Output Level Attenuation: -26 ~ 0 dBm, 0.5dBm Stepping MER: ≥40dB Connector: N type, impedance 50Ω, N to F adapter
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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: 0.05 ~ 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: 0.05 ~ 40Msps (32APSK) 0.05 ~ 45 Msps (16APSK/8PSK/QPSK) BISS Scramble: Mode 0, mode 1, mode E

10MHz Reference Clock

1*External 10MHz Input (BNC Interface); 1*Inner 10MHz Reference clock

Control

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°C (operation), -20 ~ 80°C (storage) Dimensions: 482mm×410mm×44mm Weight: 4.3 kg
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