DVB-S2 Modulator

BLANKOM HDS 8440 is a high-performance modulator developed according to DVB-S2 (EN300307) which is the second generation European broadband satellite telecommunication standard.

It converts the ASI and IP signals at the input alternatively into digital DVB-S/S2 RF or IF output. BISS scrambling mode is available.

It can be operated locally or remotely with any web browser or SNMP software.

With its state of the art design, BLANKOM HDS 8440 DVB-S2 modulator is suitable for use at broadcast uplink stations, interactive services, SNG satellite news gathering and other broadband satellite applications.

- Fully complying with DVB-S (EN300 421), DVB-S2 (EN302 307-1) and DVB-S2X (EN 302 307-2) standards
- 4 ASI inputs enabling hot backup (3 for backup), supporting 108/204 Byte Packet TS Input
- IP (100M) input TS over UDP
- QPSK, 8PSK, 16APSK, 32APSK, 8PSK-L,16APSK-L, 32APSK-L
- RF Carrier-ID (CID) setting
- Constant temperature crystal oscillator (0.1ppm stability)
- 10MHz clock syncing and output through RF port
- SFN TS support, with MIP or IIP
- 24V power output through RF output port
- BISS scrambling mode 0/1/E
- Local and remote control with SNMP or Web-server NMS
- Output frequency range: 950~2150MHz, 10kHz stepping
- Updates via web.
- Professional quality, breakthrough price.

DVB-S/S2/S2X Modulator with IP and ASI Input, RF or IF Output
## Technical specifications:

<table>
<thead>
<tr>
<th><strong>ASI Input</strong></th>
<th>Supporting both 188/204 Byte Packet TS Input</th>
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<tbody>
<tr>
<td></td>
<td>4 ASI Inputs, Supporting Hot Backup</td>
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<td></td>
<td>Connector: BNC, Impedance 75Ω</td>
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<tr>
<td><strong>IP Input</strong></td>
<td>1*IP Input (RJ45, 100M TS Over UDP)</td>
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<tr>
<td><strong>SFN Output</strong></td>
<td>MIP or IIP</td>
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<tr>
<td><strong>10MHz Input</strong></td>
<td>1*External 10 MHz Input (BNC Interface)</td>
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<tr>
<td><strong>RF Output</strong></td>
<td>RF Range: 950 ~ 2150 MHz, 10 kHz Stepping</td>
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<tr>
<td></td>
<td>Output Level Attenuation : -10.0 dBm~41.5 dBm, 0.5 dBm Stepping</td>
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<td>MER ≥ 36 dB</td>
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<td>Connector: N type, Impedance 50Ω</td>
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</tbody>
</table>

### Channel Coding and Modulation

- **Standard**: DVB-S, DVB-S2
- **Outer coding**: RS Coding, BCH Coding
- **Inner coding**: Convolution, LDPC Coding
- **Constellation**: QPSK, QPSK, 8PSK, 16APSK, 32APSK
- **FEC/Convolution Rate**: 1/2, 2/3, 3/4, 5/6, 7/8, 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**: 0.05~45 Msp, 0.05~40 Msp (16APSK/32APSK), 0.05~45 Msp (8PSK/QPSK)
- **BISS Scrambling**: Mode 0, Mode 1, Mode E

### System

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

### Miscellaneous

- **Dimensions**: 482mm×410mm×44mm, 4.3kg
- **Temperature**: 0~45°C (operation), -20~80 °C (storage)
- **Power**: 100-240VAC±10%, 50Hz-60Hz

### Ordering Guide:

- **HDS-8440**: DVB-S/S2, QPSK, 8PSK, RF Output (950-2150 MHz)
- **HDS-8440-IF**: DVB-S/S2, QPSK, 8PSK, IF Output (50-960 MHz)
- **Opt.1**: DVB-S2X
- **Opt.2**: 16APSK, 32APSK
- **Opt.3**: 8APSK-L, 16APSK-L, 32APSK-L
- **Opt.4**: RF Carrier-ID (CID) setting

*Specifications are subject to change without notice.*