



## Dvb-s/s2/t modulator board



DVB-S/S2/T modulator board is designed for converting parallel DVB transport stream to satellite IF signal modulated according to DVB-S2, DVB-S or DVB-T standards.

DVB-S/S2/T modulator board can be used for designing a variety of converters, modulators, transmodulators and other digital broadcasting equipment. A plenty of devices can be used as a source of the input transport stream:

- [DVB-S/S2 receiver](#);
- DVB-C/T/T2 receiver;
- MPEG encoder;
- TS multiplexer;
- ASI-to-DVB TS converter;
- IP-to-DVB TS converter.

The RF output signal can be fed to combiners, additional filters or directly to television transmitters or networks. Management, monitoring and configuration of the modulator board is provided via RS-232 PC interface or TCP/IP protocol (via IP-UART Control Module).

The main advantages are:

- High quality of the modulated signal;
- The possibility of fine-tuning;
- Small size and low power consumption;
- Greater flexibility.

| Parameter                                 | Value                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Modulation type                           | DVB-S2, DVB-S, DVB-T (switchable)                                                                                                                                                                                                                                                                              |
| <b>Modulation parameters DVB-S2 mode:</b> |                                                                                                                                                                                                                                                                                                                |
| Modulation                                | QPSK, 8PSK, 16APSK, 32APSK                                                                                                                                                                                                                                                                                     |
| MER                                       | > 27 dB                                                                                                                                                                                                                                                                                                        |
| FEC                                       | 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10                                                                                                                                                                                                                                                         |
| Symbol rate                               | 1-45 MSymb/s ( <u>8PSK</u> );<br>1-38.7 MSymb/s ( <u>16APSK</u> , 1 channel mode),<br>1-43 MSymb/s ( <u>16APSK</u> , 1 channel mode, <u>by request</u> );<br>1-31 MSymb/s ( <u>32APSK</u> , 1 channel mode),<br>1-34.5 MSymb/s ( <u>32APSK</u> , 1 channel mode, <u>by request</u> );<br>in steps of 1 KSymb/s |
| Roll-Off-Factor                           | 0.2, 0.25, 0.35                                                                                                                                                                                                                                                                                                |
| Pilots                                    | yes / no                                                                                                                                                                                                                                                                                                       |
| <b>Modulation parameters DVB-S mode:</b>  |                                                                                                                                                                                                                                                                                                                |

|                        |                                                                            |
|------------------------|----------------------------------------------------------------------------|
| Modulation             | QPSK                                                                       |
| MER                    | > 27 dB                                                                    |
| FEC                    | 1/2, 2/3, 3/4, 5/6, 7/8                                                    |
| Symbol rate            | 1-45 Msps, in steps of 1 Ksymb                                             |
| <b>DVB-T mode</b>      |                                                                            |
| Constellation          | QPSK, QAM16, QAM64                                                         |
| MER                    | >40 dB                                                                     |
| FEC                    | 1/2, 2/3, 3/4, 5/6, 7/8                                                    |
| Guard Interval         | 1/4, 1/8, 1/16, 1/32                                                       |
| IFFT Mode              | 2k, 4k, 8k                                                                 |
| Bandwidth              | 5, 6, 7, 8 MHz                                                             |
| <b>RF parameters:</b>  |                                                                            |
| Frequency range        | 950-2150 MHz (for DVB-S/S2 mode) / 70-865 MHz (for DVB-T mode); 1 kHz step |
| Signal level           | 80-110 dBuV                                                                |
| Connector type         | SMA                                                                        |
| Impedance              | 50 Ohm                                                                     |
| <b>Input:</b>          |                                                                            |
| Signal type            | parallel transport stream from DVB compatible modules                      |
| Connector type         | PLD-34                                                                     |
| <b>General</b>         |                                                                            |
| Control interfaces     | RS232 (inbuild)                                                            |
|                        | TCP / IP (optional with IP-control board)                                  |
|                        | Front panel (optional with Front panel board)                              |
| Power supply           | 8-18 V                                                                     |
| Power consumption, max | 6 W                                                                        |
| Dimensions             | 120x80 mm                                                                  |

*Taking into consideration that we (ROKS PrJSC) are developer and system integrator, also do not stop on our technical growth and improvement, know that view of all our devices and equipment including their technical parameters may be different from pictures presented on website and parameters listed on each device webpage.*

**Note!** All details customer has to confirm in advance during ordering and before payment. Those parameters that were not specified and / or were not agreed while ordering will be implemented as basic at the discretion of the manufacturer. Each our customer has 1.5 year warranty and 7 year aftersales support for whole range of our products.