MODTEC
MT1501

KEY FEATURES

- Output frequency range: L-Band (with or without DC voltage and 10 MHz reference in the L-Band signal) & IF Band
- Full compliance with DVBS, DVB-DSNG and DVB-S2 standards
- Carrier ID compliant
- ASI inputs or MPEG over IP input (SMPTE-2022) up to 200 Mbps
- BISS 0/1/E encryption
- Better bandwidth efficiency with low roll off
- Variable symbol rate from 0.1 to 68 Mbauds with 1 baud increment
- Low roll-off (5/10/15%) to increase the useful bitrate
- High performance
- Internal PRBS generator for test
- Physical Layer Scrambling according to EN 302 307 standard
- Embedded Web Browser
- SNMP control & monitoring
- Boot time < 14s
- Power consumption < 30W

DVB-S/DSNG/S2 SATELLITE MODULATOR

The Modtec MT1501 is a professional satellite modulator designed for applications over satellite in full compliance with the DVB-S, DVB-DSNG and DVB-S2 standards. Our modulator covers the full L-Band (950/2150 MHz) or IF Band (50/180 MHz) and offers a useful bit rate up to 200 Mbps (over ASI and IP). BUC power supply (DC voltage) and reference (High stability 10 MHz) are available on the L-Band RF output signal. BISS - (Basic Interoperable Scrambling System) scrambling can be activated to scramble the global incoming stream. The Modtec MT1501 is compliant with last requirements about Carrier ID defined in the ETSI 103 129. Dual cast feature permits to broadcast on the same frequency, by replacing the stuffing packets by the useful data file. The unit comes with Push Data Service, a receiver with the MPE-1 feature is required. Modtec MT1501 introduces the seamless acm feature that consists to change the modulation and coding without any video interruption.

PERFORMANCE & RELIABILITY

The MT1501 DVB-S2 modulator has been designed to follow all ETSI EN 302 307 requirements. Several modes of inputs bit rate adaption are possible: PCR adaptation, Padding insertion and Dummy BBFrame insertion, providing the unique modulators flexible rate adaptation. The Modtec offers a flexible baud rate (from 100K Baud to 68 Mbaud) to fully feed a 72 MHz transponder and to increase the OPEX of the satellite link. An internal PRBS generator can be used to generate a RF spectrum without any valid signal input. Modtec MT1501 offers, without option, the possibility to receive the incoming MPEG-TS stream either over ASI or Ethernet inputs.

Our modulator integrates the complete technology core required to perform high quality modulation based on our expertise. It provides customers with a best of class performance, providing a high SNR value, excellent shoulder levels and lowest phase noise. Modtec MT1501 provides a very Crystal Channel Spectrum to perform, in addition to the standard roll off, the new low roll off 5/10/15 percent and allows to broadcast in 32APSK with lower power.

You can control the modulator using the embedded web server. The GUI allows choosing the standard to be used: DVB-S, DVB-DSNG or DVB-S2, the modulation configuration, the signal input management, the control of the mute/unmute conditions for the RF output signal, etc. The GUI also offers the monitoring of the input stream (input format, useful bit rate.).