

VB272

DVB-S/S2 INPUT CARD

The VB272 input card offers monitoring and analysis of QPSK/8/16/32APSK signals found in DVB-S/S2 satellite transponders. A chassis can be equipped with a VB120 or VB220 probe controller and up to two VB272 input cards under its control. A complete configuration with a fully licenced VB120 and two VB272 interface cards provides real-time monitoring and alarming for up to four DVB-S/S2 RF inputs, 10 IP MPTS/SPTS multicasts (upgradable to 50 streams) and one ASI TS input and output. Full ETSI TR 101 290 analysis is performed on all DVB-S/S2 inputs, the ASI input and the IP input in parallel.



Technologies

Bridge Technologies options are designed to enhance the overall ability and performance of accurate monitoring in the broadcast environment

Click below to learn more about compatible technology options:

[DiSEqC 1.0](#) [Eii™](#) [ETR290™](#)

Environmental

[Euroenvironment](#) [RoHS](#) [WEEE](#)

Chassis Options

[ACC](#) [DCC](#) [EC](#) [EC-DC](#)

Overview

If the VB220 probe is used as master card, the IP monitoring capacity is increased to an impressive 260 MPTS/SPTS multicasts. The VB272 DVB-S/S2 card is delivered with one input and the second input can be enabled by a simple licence upgrade.

Together with the VB120 or VB220 controller, the operation of the VB272 is via an intuitive web interface. A GUI provides a graphical overview of scanning status and ETR290 TS data as well as a full constellation diagram of the transponder together with all relevant RF levels.

The combined unit is ideal for hybrid networks where IP is used as a carrier from head-end to the satellite uplink station. The built-in round-robin functionality allows sequential analysis of multiple VB-S/S2 multiplexes, making it possible to monitor a complete transponder using a single VB272 interface card.

The VB272 also comes equipped with full power/tone control of RF input switches and can also use the DISEqC 1.1 protocol for additional switch control. With support for modern modulation types such as 16 or 32 APSK, the VB272 is future-proof. The VB272 is delivered with standard 75 Ohm F-connectors or as an optional factory-ordered VB272-SMA with 50 Ohm SMA connectors.

Tech Features

VB272 DVB-S/S2 SATELLITE RF INPUT MODULE

- Hardware ready with two independent tuners and demodulators
- One input activated by default – second input available through VB272-RF-OPT
- Available with 50 ohm SMA female connectors (VB272-SMA) or 75 ohm F female connectors (VB272)
- 9-pin male D-SUB alarm relay
- Capable of demodulating DVB-S, DVB-S2 8PSK, 16APSK, 32APSK
- Supports DVB-S2 GOLD CODES, ROOT CODES and BOTH
- Input frequency range from 950 to 2150 MHz
- Automatic symbol rate detection requires only frequency to be configured by user
- Symbol rate range between 1 to 45Msym/s
- Input stream selection (for DVB-S2)
- PL scrambling mode setting (for DVB-S2)
- PL scrambling code setting (for DVB-S2)
- DVB-S 1/2, 2/3, 3/4, 5/6, 7/8 FEC
- DVB-S2 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 FEC
- Configure LNB local oscillator frequency and set input satellite frequency directly
- 13V/18V/22kHz antenna signalling present
- DISEQC 1.1 compatible for control of Committed L-band Switches
- Modulation Error Rate (MER) in dB
- Signal to Noise Rate (SNR) in dB
- Error Vector Magnitude (EVM) in% and in dB
- Constellation diagram maintained in GUI
- BER pre Viterbi (for DVB-S)
- BER post Viterbi (for DVB-S)
- BER post LDPC-BCH (for DVB-S2)
- RS Packet Error Count
- Front-end lock indication in GUI and through front panel red/green LED
- Channel power with an absolute accuracy of +/- 3 dB and a resolution of 1 dB
- Trend graphs over time for Channel Power and MER up to 2 years – requires VideoBRIDGE Controller server
- Carrier level
- Carrier frequency offset
- Symbol rate offset

- Energy per information bit to noise power spectral density ratio (E_{info}/N_0) in dB
- Energy per transmitted bit to noise power spectral density ratio (E_b/N_0) in dB
- Energy per symbol to noise power spectral density ratio (E_s/N_0) in dB
- Pilot detection (for DVB-S2)
- Frame length (for DVB-S2)
- Null packet deletion (for DVB-S2)
- Input Stream Synchronization Indicator (ISSI) (for DVB-S2)
- Number of input streams (for DVB-S2)
- Capable of Short and Normal frames
- Stream types:
 - Generic Packetized Stream
 - Generic Continuous Stream
 - Transport Stream
- Coding and modulation
 - Constant Coding and Modulation
 - Adaptive/Variable Coding and Modulation (ACM/VCM)
- Roll-off factors: 0.35 / 0.25 / 0.20
- Capable of Multi Input Stream (MIS) with tuning selection of individual Input Stream Identifiers (ISI)

RF SPECIFICATIONS

- Frequency range: 950 to 2150 MHz
- RF power level: -65 to -25 dBm
- RF power level accuracy: +/- 2 dB
- RF power level resolution: 0.1 dB
- SNR: >30 dB
- BER and PER readings

Software Options

VB272RF-OPT – This option opens up the second RF port on the VB272 module for a total of 2 fully independent RF inputs

Ordering Codes

VB272 – DVB-S/S2 Demodulator Interface Blade single RF input – 75 ohm female F-connector model

VB727-SMA – DVB-S/S2 Demodulator Interface Blade single RF input – 50 ohm female SMA connector model

VB272RF-OPT – Additional RF input option for VB272 card for a total of two, factory ordered

VB272RF-UPGR – Additional RF input option for VB272 card for a total of two

Documentation

[Download User Manual](#)

[Download Quick Start Guide](#)

Related Products



VB120

IP MONITOR PROBE



VB273

DVB-S/S2 INTELLIGENT
REDUNDANCY SWITCH