

QAM DVB-C/C2 Dual Monitoring Blade

VB266



The VB266 QAM DVB-C/C2 RF input blade brings support for the latest cable modulation standards to the VideoBRIDGE product line. With support for QAM16 all the way to QAM4096, the VB266 includes all the modulation formats needed for modern networks with high-density MPTS transports. Each VB266 includes two independent tuners. One is enabled by default and the other is enabled with the VB266RF-LICENSE. Together with the VB120 or VB220 controllers, this allows up to 4 RF inputs in a 1RU chassis.

A complete configuration with a fully licensed VB120 provides real-time monitoring and alarming for 4 QAM inputs, 50 IP MPTS/SPTS multicasts, and an ASI TS input and output. ETSI TR 101 290 analysis and monitoring is performed in parallel for the QAM inputs, the ASI input and the IP input. If a VB220 is used as the controller, the IP monitoring capacity is increased to 260 MPTS/SPTS multicasts in addition to the RF inputs.

The combined unit is ideal for hybrid networks where IP is used as a carrier from head-end to the regional edge multiplexer/modulator. The built-in round-robin functionality allows sequential analysis of multiple QAM multiplexes, making it possible to monitor the total broadcast contents of a cable transmission system using a single VB266. The VB266 QAM DVB-C/C2 input blade is an ideal solution for complete monitoring in DVB-C/C2 or hybrid DVB-C/C2/IP networks. One VB266 module is capable of demodulating two multiplexes (one per input) for ETSI TR 101 290 fault detection and alarm generation in the full frequency band (44-1000 MHz).

KEY FEATURES

- Dual input digital cable receiver (one input standard, the second is optional)
- Fully independent inputs
- Fully compliant with ETS 300 249
- ITU.T J.83 (Annex A/B/C)
- QAM modes: 16,32,64,128,256, 1024, 4096
- Constellation Diagram
- Wide symbol rate range of 0.87 to 7.0 Mbaud
- Selectable IF filter (6/8 MHz)
- Excellent neighbor channel isolation
- Dual 75 ohm F-connector input
- Pre-FEC BER
- Post-FEC BER
- MER
- Input signal level
- Frequency offset
- Symbol rate offset
- Spectrum inversion
- AGC Lock/Carrier lock indication
- Inputs support round-robin operation
- Fully controlled via backplane by VB120 or VB220

SPECIFICATIONS

QAM DVB-C/C2 Dual Monitoring Blade VB266

SPECIFICATIONS

Frequency range: 44 - 1GHz
Symbol rate: 0.87 - 7.0Msym/s
RF power level: -60dBm to -10dBm (+/-1.5dB)
SNR*: < 37dB (+/-2dB)
MER: < 37dB (+/-2dB)
BER pre-FEC: > 1.0E-8
BER post-FEC: > 1.0E-9
Input sensitivity: -60dBm
* 6.9MS, BER 2×10^{-4} , QAM256

RF INPUTS

Dual 75Ω F-connector, female

MECHANICAL

Standard 19" 1RU rack-mount
W x H x D: 19 x 1.7 x 15.75in. (483x43x400 mm)
Weight: 9.3 lbs (4.2 kg) fully populated

ENVIRONMENT SPECIFICATIONS

Operating temperature: 0°C to 45°C
Storage temperature: -20°C to 70°C
Operating humidity: 5% to 95% non-condensing

CONTROL AND MANAGEMENT

Fully controlled through backplane
Accessible through master VB120 or VB220 user interface

POWER SUPPLY REQUIREMENTS

Backplane Voltage: 100 - 240V AC
Power Required: 15W
Draws power from backplane (+5V)
Maximum 5W dissipated per card