Novra S300V

DVB-S2 IP MPEG Receiver/Router

Overview

Novra is pleased to introduce the S300V into our lineup of DVB-based IP/MPEG receiver/routers. Based on Novra's latest generation hardware platform, the enhanced features of the S300V extend your DVB-S2 performance by expanding operation down to 100 Ksps and up to 32 APSK; by increasing data throughput to 80 Mbps; and by handling complex multi-stream VCM signals with embedded Input Stream Identifier (ISI) filtering.

The S300V is designed for use as a video streaming streaming appliance. It provides a user-friendly graphical user interface, that only requires the selection of the desired program (from the displayed Program Listing) and the destination IP address/port. The S300V provides the flexibility to choose which Audio and Teletext PID's to be include with the stream, and will re-generate the PAT to support Single Program Transport Streams (SPTS) or Multi-Program Transport Streams (MPTS).

Applications

The S300V may be used to deliver IP-based applications, but is ideally suited to applications that involve the aggregation and distribution of MPEG-2 programming. Typical applications include: hotel or cruise ship infotainment, IPTV head-ends, corporate LAN's and cable network head-ends.

Features

- DVB-S/DVB-S2 Complaint
  - Multi-stream VCM Operation with ISI Filtering
  - 32 APSK Operation
- Downloadable Firmware
- Gold Code Sequence Selection
- 80 Mbps Sustained Throughput
- RJ45 10/100 Base-T Ethernet Interface
- Exceptional Flexibility - Delivery of IP or MPEG Services
- IGMP Filtering

MPEG Features

- Full Transponder Program Listing
- User Friendly, Program-Based Configuration
- Selectable Audio or Teletext PID pass-through
- Selectable SI Table PID pass-through
- Single Program PAT Re-generation
- SPTS/MPTS Support
- Multicast full DVB Multiplex onto LAN

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Technical Specifications: Novra S300V Receiver/Router

RF Tuners

Receiving Frequency: 950 to 2150 MHz
- Frequency Acquisition: ± 10 MHz above 10 Msps
- Input Signal Level: -70 dBm to -25 dBm

Multi-standard Demodulation
- QPSK: 100 Ksps to 45 Msps (DVB-S)
- QPSK: 100 Ksps to 45 Msps (DVB-S2)
- 8PSK: 100 Ksps to 45 Msps (DVB-S2)
- 16 APSK: 100 Ksps to 45 Msps (DVB-S2)
- 32 APSK: 100 Ksps to 45 Msps (DVB-S2)
- Automatic Symbol Rate detection and lock
- Automatic Code Rate detection and lock
- Data Throughput: 80 Mbps
- Nyquist Root Filter: 0.2, 0.25, 0.35 rolloff
- Multi-stream VCM
- ISI Filteirng
- ACM Support

Multi-Standard Decoding FEC
DVB-S
- Viterbi 1/2, 2/3, 3/4, 5/6, 6/7, 7/8 puncture rates
- Reed Soliman 16 bit decoder

DVB-S2
- LDPC 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 rates
- BCH (Bose-Chaudhuri-Hocquenghem) decoder

Gold Code Sequencing
- 0 to 262143 Sequence Selection

LNB Power and Control
- LNB Supply Voltage: 11/15V, 13/18V, 21V or off
- LNB Supply with long line compensation
- LNB Control: 22 KHz, 44 KHz, or off
- LNB Supply Current: 400 mA with Short Circuit and Surge Protection

Configuration
- IP Address Configuration
- PID/Program Selection
- LNB Power
- Transponder Settings
- Management Console Application available as an MS Windows Executable
- Command Line tool available for Linux, Windows, MAC OS, and FreeBSD

Status Monitoring
- Signal Strength
- Signal Lock, Data Lock
- Error status: S/N, Uncorrectable Errors

Status Indicators
- Power: Red LED
- Lock: Blue LED
- Data: Blue LED
- Ethernet Link (green) and Transmit (yellow)

Hardware Capabilities
- Multiprotocol Encapsulation (MPE)
- PID Filters: 16
- Simultaneous MPEG Programs: 16
- Internal Hardware Watchdog
- Non-Volatile Configuration Storage
- Field upgradable operating system for new s/w releases and functional upgrades

Physical Interfaces
- RF Input Connector: F-Type, 75 ohms
- Ethernet 10/100 Base-T LAN Interface: RJ-45
- CI Slot: PCMICA

Physical/Environmental
- Height: 1.41 in (3.58 cm)
- Width: 5.22 in (13.26 cm)
- Depth: 4.10 in (10.42 cm)
- Weight: 1 lbs (0.46 Kg)
- Operating Temperature: 0C to 40C
- Storage Temperature: -55C to 85C
- Operating Humidity: 10 to 90% Non-Condensing

Standards/Regulatory
- UDP/IP Protocol
- IP Multicast
- IGMP: V1.0, V2.0
- ETSI 301.192 DVB
- ISO/IEC 13818-1
- ISO/IEC 13818-6
- IEEE 802.3 10/100 Mbps
- FCC/Industry Canada
- EN 55022 (Emission)/EN 55024 (Immunity)
- Safety EN 60950

Mounting Options
- 1RU Mounting Plate for a single S300V
- 1RU Mounting Plate for up to three S300V's

Redundancy Solutions for 100% Availability
- 1 RU enclosure for multiple S300's
- Redundant or Backup Power Supplies
- See MSR300 Brochure for Configuration options

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Printed in Canada, Jan, 2014 Rev 1.02