

Overview

Novra is pleased to introduce the S300CA into our lineup of DVB-based IP/MPEG receiver/routers. Based on Novra's latest generation hardware platform, the enhanced features of the S300CA 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 S300CA is designed for use as a video streaming streaming appliance for encrypted programming. 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 S300CA provides the flexibility to choose which Audio and Teletext PID's to be included with the stream, and will re-generate the PAT to support Single Program Transport Streams (SPTS) or Multi-Program Transport Streams (MPTS). The inclusion of a Common Interface (CI) slot in the S300CA provides a cost effective means to provide compatibility with the vast majority of currently available DVB encryption systems using conditional access CAM and subscription card hardware.

Applications

The S300CA is ideally suited for small-medium enterprise/consumer use, delivering IP or MPEG applications that require encrypted security measures or providing aggregation/distribution of encrypted MPEG-2 programming. Typical applications include: IPTV content aggregation (head end) and/or delivery, hotel or cruise ship infotainment, distance education, digital signage, corporate LAN's and cable network head-ends.

Features

- DVB-S/DVB-S2 Compliant
- RJ45 10/100 Base-T Ethernet Interface
- Downloadable Firmware
- Support for Gold Code Sequences
- 80 Mbps Sustained Throughput
- Exceptional Flexibility - Delivery of IP or MPEG Services
- CI Slot for CAM and Smart Card

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
- Multicast full DVB Multiplex onto LAN

Technical Specifications: Novra S300CA 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 Filtering
- 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: PCMCIA

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 S300CA
- 1RU Mounting Plate for up to three S300CA's

Redundancy Solutions for 100% Availability

- 1 RU enclosure for multiple S300's
- Redundant or Backup Power Supplies
- See MSR300CA Brochure for Configuration options

