



Overview

Novra is pleased to introduce the MSR300 into our lineup of DVB-based IP/MPEG receiver/routers.

The MSR300 is a 1 RU platform that supports up to 3 independent DVB-S2 receive modules. Each module is capable of receiving an independent satellite signal, or modules may be combined to receive different transponders from the same satellite.



The enhanced feature set of the MSR300 extends your DVB-S2 performance by expanding operation to 32 APSK and down to 100 Kbps; by increasing data throughput to 80 Mbps; and by handling complex multi-stream VCM signals with embedded Input Stream Identifier (ISI) filtering. The MSR300CA is designed for use as a video streaming appliance. It provides a simple, intuitive, graphical interface for program selection and assignment. The MSR300 provides the flexibility to choose which Audio and Teletext PID's to 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 MSR300 is ideally suited for small-medium enterprise use, delivering IP or MPEG applications that require aggregation and distribution of video-based programming. Typical applications include: IPTV content aggregation (head end) and delivery, hotel or cruise ship infotainment, distance education, digital signage, corporate LAN's and cable network head-ends.

Features

- DVB-S/DVB-S2 Compliant
 - Multi-stream VCM Operation with ISI Filtering
 - 32 APSK Operation
- Up to 3 DVB-S/DVB-S2 inputs
- Option to Combine the Satellite Inputs
- Individual 100 BaseT Ethernet Outputs
- Optional Combined GigE Ethernet Output
- Single or Redundant Power Supply
- CMCS Network Mgmt Tool

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



Technical Specifications: Novra MSR300 Receiver/Router

RF Tuners (up to 3)

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

Multi-standard Demodulation (per receiver module)

- QPSK: 100 Ksps to 45 Msps (DVB-S)
- QPSK: 100 Ksps to 45 Msps (DVB-S2)
- 8PSK: 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 (per receiver module)

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 (per receiver module)

- 0 to 262143 sequences

LNB Power and Control (per receiver module)

- LNB Supply Voltage: Selectable 11/15V, 13/18V, 21V or off
- LNB Supply with selectable long line compensation
- LNB Control: Selectable 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 (per receiver module)

- Signal Strength
- Signal Lock, Data Lock
- Error status: C/N Viterbi BER, Uncorrectable Errors

Status Indicators (per receiver module)

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

Hardware Capabilities (per receiver card)

- Multiprotocol Encapsulation (MPE)
- PID Filters: 32
- Simultaneous MPEG Programs: 16
- Internal Hardware Watchdog
- Non-Volatile Configuration Storage
- Field upgradable operating system for new s/w releases and functional upgrades

Operating Systems

- Once Configured, receiver supports all OS's

Physical Interfaces (per receiver module)

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

Optional Combined Physical Interfaces

- 1-to-3 RF Input connector: F-Type, 75 Ohms
- 3-to-1 Ethernet 1000BaseT LAN Interface: RJ-45

Physical/Environmental

- Height: 1.75 in (4.45 cm)
- Width: 17 in (43.20 cm)
- Depth: 12 in (30.50 cm)
- Weight: 6.4 lbs (3 Receiver modules installed)
- 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

Other MSR300 Models

- MSR300CA: Multi-Input DVB-S2 Receiver with CI

