Novra MSR300

DVB-S2 Multi-Input Satellite Receiver/Router

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 a 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 Ksps; 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 Complaint
  - 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

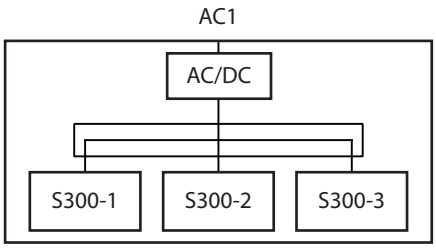
MPEG Features

- 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

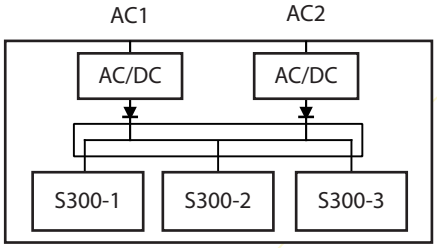
For additional information or details on Novra's product offering, please contact us at:
North American Headquarters 900 - 330 St. Mary Avenue, Winnipeg, MB Canada R3C 3Z5
t. 204.989.4724 f. 204.989.4640 e. info@novra.com w. www.novra.com

Configuration Options: Novra MSR300 DVB-S2 Multi-Input Satellite Receiver/Router

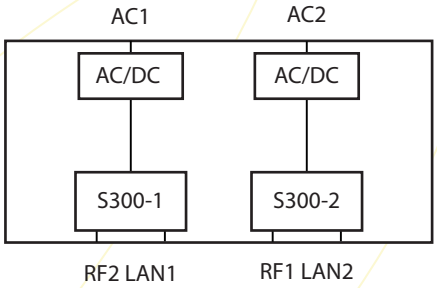
Power Configuration



P1 - Single Primary Power

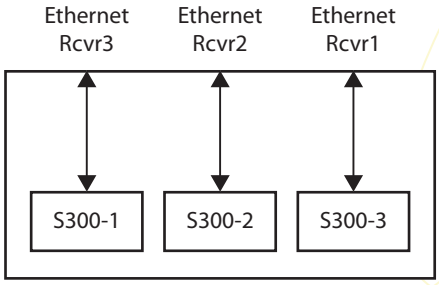


P2 - Dual Backup Power

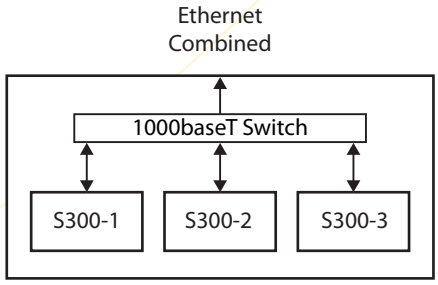


P3 - Dual Redundant Power/LAN/RF

LAN Configuration

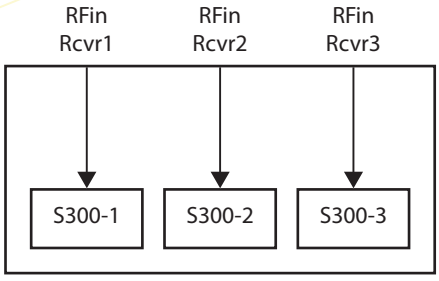


LI - LAN Individual 100baseT

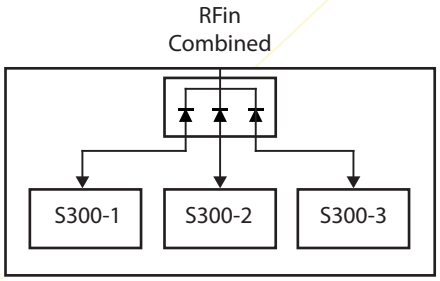


LC - LAN Combined 1000baseT GigE

RF Configuration



RI - RF Individual



RC - RF Combined DC Pass

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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 Filteirng
- 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

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: PCMICA

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

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