



Novra S200-Pro DVB-S2 Data Receiver/Router



Overview

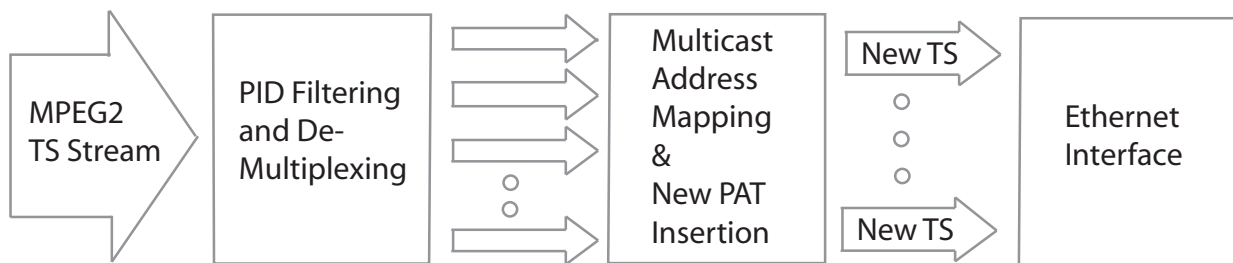
Novra is pleased to introduce the S200-Pro into our lineup of DVB-based IP data receiver/routers. Based on Novra's Generation-II S75 hardware platform, the S200-Pro provides support for both DVB-S and DVB-S2 air interface standards. The S200-Pro lets you choose your demodulation technique, supporting QPSK and 8PSK over a variety of coding rates. Compatibility with the DVB-S2 standard enables you to take advantage of the significant efficiency gains when compared with DVB-S.

The S200-Pro augments IP delivery with enhanced MPEG content aggregation and distribution capabilities that make ideally suited to pass MPEG-2 elementary stream PID's directly onto the host LAN for redistribution or viewing. Processing of the incoming stream enables the operator to set up multiple programs each with its own internally generated mini-PAT (see Functional Block Diagram below).

Installation of the S200-Pro is easy and non-invasive, as the host machine does not need to be opened, nor are any drivers required. The S200-Pro works with any operating system and makes the received data available to any host on the LAN.

Applications

The S200-Pro 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.



S200-Pro MPEG Reception Functional Block Diagram

Features

- Compatible with TCP/IP Protocol Suite
 - DVB-S/DVB-S2 Complaint
 - Downloadable Firmware
 - 70 Mbps Sustained Throughput
 - RJ45 10/100 Base-T Ethernet Interface
 - Exceptional Flexibility - Delivery of IP or MPEG Services
 - IGMP
 - Optional Fixed Key Conditional Access Decryption
- MPEG Features
 - Raw Transport Stream Forwarding
 - SPTS/MPTS
 - Multi-PID Mapping to a Single IP Address
 - Single-PID Mapping to Multi-IP Addresses
 - Forward Original PAT, or Generation of Single Program Mini-PAT's
 - Multicast full DVB Multiplex onto LAN



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Technical Specifications Novra S200-Pro Receiver/Router

RF Tuner

- Receiving Frequency: 950 to 2150 MHz
- Frequency Acquisition: $\pm 50\%$ Symbol Rate up to ± 10 MHz
- Input Signal Level: -70 dBm to -25 dBm

Multi-standard Demodulation

DVB-S

- QPSK: 1.0 to 45 Msps (auto selection)

DVB-S2

- QPSK: 1-30 Msps (auto selection)
- 8PSK: 1-30 Msps (auto selection)

- Data Rate: 72 Mbps

- Nyquist Root Filter: 0.2, 0.25, 0.35 rolloff

Multi-Standard Decoding FEC (Forward Error Correction)

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

LNB Power and Control

- LNB Supply Voltage: Selectable 13/18V, 11/15V, 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 Selection
- LNB Power
- Transponder Settings: Symbol Rate, Frequency, Polarization, Band, Power
- Management Console Application Currently Available as both an Executable and a DLL for MS Windows

Status Monitoring

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

Status Indicators

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

Hardware Capabilities

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

Operating Systems

- Once Configured, Receiver Supports all Operating Systems

Physical Interfaces

- RF Input Connector: F-Type, 75 ohms
- Ethernet 100 Base-T LAN Interface: RJ-45

Physical/Environmental

- Height: 1.41 in (3.58 cm)
- Width: 5.22 in (13.26 cm)
- Depth: 4.10 in (10.42 cm)
- Operating Temperature: 0C to 40C
- Storage Temperature: -55C to 85C
- Operating Humidity: 10 to 90% Non-Condensing

Standards/Regulatory

- UDP/TCP/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 CE
- Emission EN 55022
- Immunity EN 55024
- Safety EN 60950

Other S200 Models

- S200: DVB-S2/DVB-S IP Data Receiver
- S200CA: DVB-S2/DVB-S IP/MPEG Data Receiver with CI Slot

