



# Novra S200 DVB-S2 Data Receiver/Router



## Overview

Novra is pleased to introduce the S200 into our lineup of DVB-based IP data receiver/routers. Based on Novra's Generation-II S75 hardware platform, the S200 provides support for both DVB-S and DVB-S2 air interface standards. The S200 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.

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

The S200 family of receivers support all of the powerful features found in the S75 including conditional access common interface (S200CA), MPEG content distribution to the LAN (S200-Pro) and fixed key conditional access (S200-Pro).

## Applications

The S200 is perfectly suited for a range of consumer or small-medium enterprise applications, including reception of IP-based services. Applications include, weather imaging and data, distance education, digital signage, data content distribution, streaming content, Internet over satellite, and IPTV content distribution to single or multiple viewers.

## Features

- Compatible with TCP/IP Protocol Suite
- DVB-S2/DVB-S Compliant
- Downloadable Firmware
- >70 Mbps Sustained Throughput
- RJ45 10/100BaseT Ethernet Interface
- Application Transparent
- Small Footprint
- IGMP
- Delivery of MPEG Video services (refer to S200-Pro or S200CA Brochures)



# Technical Specifications Novra S200 Receiver/Router

## RF Tuner

- Receiving Frequency: 950 to 2150 MHz
- Frequency Acquisition:  $\pm 50\%$  Symbol Rate up to  $\pm 10$  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

## Status Monitoring

- Signal Strength
- Signal 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

- S200Pro: DVB-S2/DVB-S IP/MPEG Data Receiver
- S200CA: DVB-S2/DVB-2 IP/MPEG Data Receiver with CI Slot

