

Broadcast Solutions



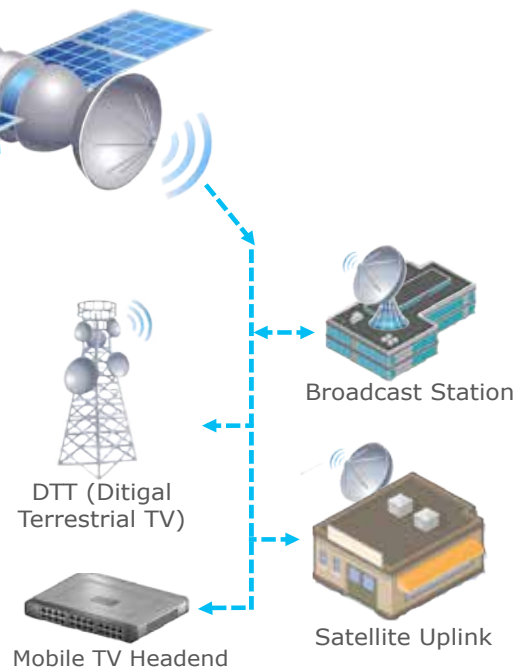
Boost Your Satellite Capacity



Contribution



Distribution



Cost-effective satellite transmission solutions for broadcasters

NovelSat offers a range of Satellite Broadcast Solutions. At the heart of these solutions are a selection of professional satellite Modulators, Demodulators, Modems and PCIe-based cards for OEM applications, **all supporting market standards (DVB-S/S2/S2X) as well as NovelSat NS4™**, the world's most efficient satellite transmission software package.

“With the NovelSat NS3 platform, EBU was able to increase throughput of its satellite transponders by 30%.”

Paolo Pusteria, Head of Procurement & Network Partnerships, EBU

In addition, NovelSat offers broadcast network solutions that include NovelNet, a full featured NMS (Network Management System), and NovelSat ProtCASTER, a DRM, scheduling and entitlement solution for the most secure, efficient satellite/terrestrial broadcast networks.

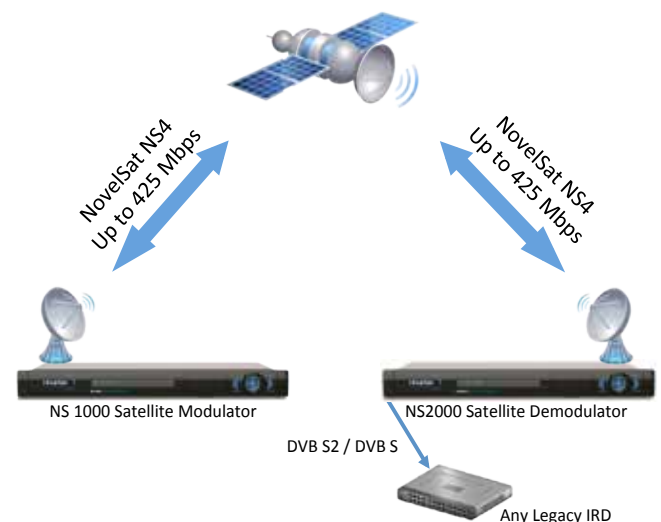
Satellite Broadcasters Gear Up for the World's Major Sports Events with NovelSat NS4 and ProtCASTER

Boost TV Distribution Efficiency

TV Contribution and Distribution networks can easily reduce operating costs without replacing existing network elements.

- Replace the existing DVB modulator at your Hub site with a NovelSat NS1000.
- Simply add a NovelSat NS2000 Satellite Demodulator in front of the existing IRD stack in the head ends.

NovelSat NS4 technical advantages include unsurpassed 2% Roll-Off-Factor, enhanced spectral efficiency algorithms and improved tolerance for signal impairments and all types of interference.



SNG Fleet: Bandwidth Saving Solution

When using a NovelSat NS300X or NS3000 Modem, an SNG operator covering an event can send and receive bi-directional video and IP data between the remote and the studio using existing bandwidth at no additional cost.

This is accomplished using:

- NovelSat DUET CeC – Software which enables you to double traffic without increasing satellite bandwidth
- Dual Channel Mode – Simultaneous mix of ASI and IP over the same carrier
- An SNG can simultaneously deliver live HD video while receiving IP data and VoIP from the home studio.
- NovelSat FreeBand – Optional solution, offering free SNG satellite contribution bandwidth resource saving.

unbreakable AES 256-bit encryption, delivering the highest level of satellite content security with easy-to-use tools for:

- **Scheduling:** Pre-schedule broadcast events and book the necessary resources and permissions to facilitate the smooth and secured streaming of content
- **Content Entitlement:** Protection defined per TV channel (PID)



NovelNet NMS

Automates network workflows for satellite services SLA assurance and Bandwidth-On-Demand applications. NovelSat NMS is a scalable platform that can be used to dynamically provision, manage and maintain services in satellite and mixed satellite-terrestrial networks.

“Using resources that we already have in our distribution network to support our remote contribution units just makes sense. And now we know it is possible.”

Henry Barz
CTO, Rede Novo Tempo de Comunicaçãocao



ProtCASTER: Content Protection for Satellite Broadcast

NovelSat ProtCASTER is a cutting-edge, secured satellite network solution for professional delivery of broadcast data and video. It is the first satellite broadcast DRM (Digital Rights Management) platform that is based on virtually



NS10C / NS20C: PCIe OEM Modulator / Demodulator Cards

The NS10C & NS20C are versatile PCIe OEM broadcast modulator and demodulator cards, ideal for both terrestrial and space-side OEM satellite broadcast applications. These full-featured cards are designed for easy integration into any PC-based satellite broadcast headend platform, cable, DTH, OTT, and mobile flyaways and SNGs for contribution

Supporting NovelSat Solutions for Broadcast



NS1000/NS2000 Satellite Modulator/ Demodulator

The NovelSat NS1000 satellite modulator and NS2000 satellite demodulator redefine bandwidth efficiency with 0.1- 80Msps symbol rate and advanced features including ACM, TSoIP and more.



NSR9100, NSR9800 N+1 Redundancy Switch

Enables hot standby redundancy support for modulators, demodulators and modems while protecting up to 8 units. The switch supports RF switching as well as terrestrial interfaces switching.



NSB5000- Multi Carrier Modular Broadcast Platform (Coming Soon)

State-of-the-art platform enabling flexibility, high performance solutions within a compact form factor and efficient BOM. Based on NS10C/NS20C cards for a combination of multiple demodulators, modulators or both in a single 1U box.

Success Stories at a Glance

EBU

Broadcast Distribution: NovelSat NS4

- TV Distribution: Major Sports Events
- 1st live UHDTV satellite transmission
- Hundreds of sites worldwide
- Increased throughput by more than 30%
- Enabled 18 TV Channels instead of 12 over the same Satellite Bandwidth
- NovelSat ProtCASTER content protection solution

GLOBOSAT

Cost Savings with Legacy Equipment

- NS3000 Modem configured:
 - Input - NovelSat NS3
 - Output - DVB-S/S2 RF signal
- Upgrade for legacy satellite stations
- Kept legacy equipment – only added single modem per site
- Applied to IRDs with and without ASI Input
- Applied to legacy architecture – DVB-S/S2



www.novelsat.com • info@novelsat.com

Related products:

NS3000 Professional High-Data Rate Satellite Modem (up to 850Mbps), NS1000 Satellite Modulator, NS2000 Satellite Demodulator