



# NovelSat Advantages for DSNG Operators

Application note

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## 1. Introduction

In the face of the rising cost and increasing competition for satellite bandwidth, NovelSat DSNG solutions address provide the **most cost-effective** way to achieve spectrum requirements and deliver reliable, high-quality video for live broadcasts of news and other events. NovelSat also offers solutions that create **new sources of revenue** from DSNG-based services.

### 1.1 Spectral Efficiency

NovelSat satellite modems, modulators and demodulators, powered by NovelSat NS3™ transmission technology, typically deliver **30% to 60% more bandwidth per Mhz** compared with DVB-S2 solutions. NovelSat solutions also enable DSNGs to deploy 35% smaller antennas and to reduce HPA size and power consumption. This lowers transmission overhead while raising transmission capabilities and quality. The NovelSat modem can work in DVB-S2 mode and can also use NovelSat DVB-S2 PLUS (5% ROF). Highest efficiency, however, is achieved by using NovelSat NS3.

NovelSat equipment delivers HD video over standard-definition infrastructure and can simultaneous stream video and data over a single carrier with dynamic bandwidth allocation, enabling applications such as remote control of DSNGs, via satellite, from the home studio without deploying a trained technician in the field.

### 1.2 Combined Video (ASI) and Data (IP)

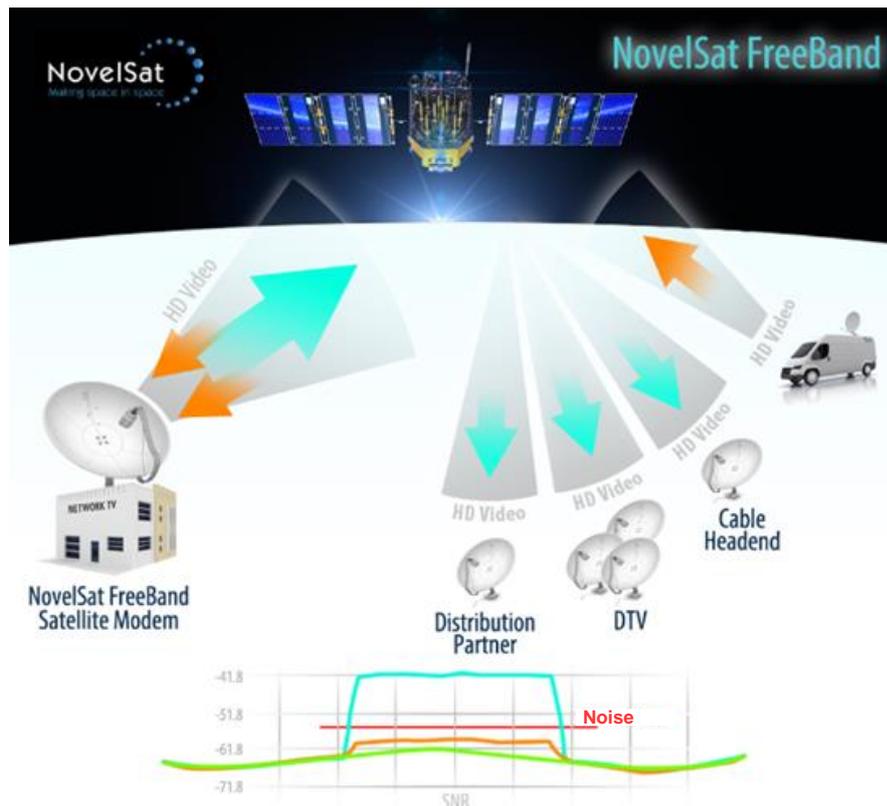
NovelSat modulators and modems combine both video and data on the same stream with automatic prioritization of the video.

### 1.3 NovelSat DUET – Reusing bandwidth to double capacity

NovelSat DUET™ software-based band reuse technology enables teleports and DSNG operators to simultaneously use the same bandwidth for both uplink and downlink, doubling the effective data rate. With NovelSat DUET, you can transfer both video and IP data at any data rate.

## 1.4 NovelSat FreeBand

With NovelSat FreeBand, broadcasters can access free satellite bandwidth for DSNG video contribution using the same bandwidth and frequency that they own and already use to deliver video to the point-to-multipoint distribution network (e.g., cable headends). Broadcasters no longer have to pay for satellite bandwidth for each DSNG within the footprint of their satellite distribution network. This translates into huge savings in operational costs. If you consider that satellite bandwidth for a DSNG can cost \$250 per hour, NovelSat FreeBand can pay for itself in a matter of weeks.



## 1.5 NovelSat Sky-Fi

NovelSat Sky-Fi is the first portable satellite-based wireless Internet access solution. Delivering the industry's most bandwidth efficient satellite transmission, NovelSat Sky-Fi enables DSNG operators to offer free or low-cost public Wi-Fi access at costs comparable to landline connections. This additional source of revenue for DSNG operators is best suited for arena events, tradeshows and large corporate events where data demands come from intense peak activity.

## 1.6 Remote Wi-Fi Camera

Multi-camera operation has long been on the wish list of many broadcasters. However DSNGs supporting this capability have been expensive. Now, NovelSat can deliver Multi-camera solutions, even for the smallest flyaway, at minimal cost.

Using a NovelSat NS3000 Modem and NovelSat DUET, a DSNG operator covering an event that requires multiple cameras, such as a live interview, can transmit video from multiple cameras using existing bandwidth at no additional cost. A 'slave' camera can be connected either via Ethernet or Wi-Fi at the remote site and can be controlled from the studio control room. In fact, any camera can be used, from professional cameras to consumer video and even smartphones.

## 2. About NovelSat

NovelSat is a technology company dedicated to providing the next-generation modulation standard for satellite communications. NovelSat NS3™ technology – encompassing ultra-high end modulators, demodulators, modems and ASICs – essentially replaces DVB-S2 as the industry standard. NovelSat delivers the fastest data rates, the widest pipe and the most compelling ROI. That means you get the best performance at the lowest costs, resulting in the highest profits.

### 1.7 Contact Information

#### Support Hot Line

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