Interference caused by mis-aligned antennas, malfunctioning equipment and accidental and deliberate transmissions can create interference and noise disrupting operations. These signals can negatively impact video broadcasts, streaming data and many other applications degrading the quality of service being delivered by broadcasters, service providers, teleport operators and satellite operators.

Traditional approaches to resolving interference requires identifying the source and when possible working with the interfering party to mitigate the effects. SigX® a signal cancellation appliance offers an alternate approach to resolving interference without relying on cooperation from the interfering party. The appliance directly cancels RF interference (RFI) from satellite communication links in real-time to protect valuable bandwidth.

**Bandwidth Protection**
SigX is a small form factor appliance that employs advanced signal cancellation algorithms to cancel one higher power modulated signal or suppress up to four CW or sweeping CW signals.
SigX helps to:
- Protect an organization’s revenue or mission by maintaining or restoring service
- Reduce support costs and troubleshooting time by accelerating the time to resolution
- Deliver a higher level of quality of service to customers

**Applications**
The signal cancellation capability can be applied to a wide range of communications systems: space or ground-based, fixed or mobile, wired or wireless, broadband or narrowband. Its applications are also diverse: communication interference removal and noise reduction, communications signal separation and to enhance geolocation efforts.

### Key Features

**Input Frequency Coverage**
- L Band (950-2150 MHz) (IF or UHF with converter)

**Maximum Protected Signal Bandwidth**
- 54 MHz

**Input/Output Power Levels**
- -60 to -25dBm
- 50 ohm SMA connectors

**Internal 10MHz reference**

**RF Interference Types**
Up to 4 CW or sweeping CW signals can be suppressed or one higher power modulated signal of the following modulation types
- BPSK
- QPSK
- OQPSK
- 8PSK
- 16APSK

Cancelled waveforms include:
- CCSDS
- DVB-S2 CCM
- DVB-S2 ACM

Field upgradable for future modulation and waveforms
Cost Effective Operation

By placing SigX on the receive side of the communication link, the appliance operates without the need for similar equipment on the transmit side. As a result, it protects point-to-point and point-to-multipoint networks. SigX fits between the downconverter and the satellite modem or demodulator. It cancels RFI from communication signals that pass through it. Since it adds minimal delay to the communications path and does not require added bandwidth, it restores communications and enhances network robustness by protecting bandwidth from interference while preserving investments and limiting impact to operations. SigX offers high reliability and requires no maintenance.

Simple and Fast Configuration

With very minimal configuration, SigX can be setup to cancel severely interfered bandwidth. The signal cancellation appliance can be setup and running within minutes using a few simple easy to follow steps.

Summary

For service providers, satellite operators, teleport operators and high availability services alike, the ability of SigX to quickly cancel CW and Sweeping CW and high powered interference helps assure QoS, interference-free communications and time-sensitive delivery of critical communications, while leveraging infrastructure investments.

Ordering Information

Please provide the part number listed below when ordering to expedite the process.

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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| SAT-SIGX-CW | SigX 1.0 - CWX  
Multiple CW/Swept CW  
- Up to 4 CW or sweeping CW signals can be suppressed  
- Small form factor  
- 50 ohm SMA connectors  Single Input (R1/TX1 inputs)  
- Internal 10MHz reference |
| SAT-SIGX-HPX | SigX 2.0 - HPX  
High Power Modulated Signal Cancellation  
Multiple CW/Swept CW  
- Up to 4 CW or sweeping CW signals can be suppressed or one higher power modulated signal  
- Small form factor  
- 50 ohm SMA connectors  Single Input (R1/TX1 inputs)  
- Internal 10MHz reference |