BANDWIDTH CANCELLATION

UNRIVALLED CAPACITY GAIN THROUGH FULL DIGITAL PROCESSING

ST Engineering

Bandwidth Cancellation is a technology which allows transmission of two carriers into the same leased satellite bandwidth. Bandwidth Cancellation is a technology built into ST Engineering iDirect modems which processes signals completely in the digital domain rather than using the traditional analogue processing. This enables the use of several algorithms to signifi cantly increase the cancellation performance, speed up synchronization and add several additional monitoring parameters for simplifi ed operation.

The Bandwidth Cancellation algorithm coexists with other technologies resulting in the most effi cient usage of space capacity. A very high tolerance for carrier power density and symbol rate unbalance makes BWC a viable choice in almost any case.

BWC Bandwidth Canceller

A high performance built-in equalizer enables cancellation at any carrier rate, ranging from a simple 1 Mbps circuit all the way up to a super high rate trunk with full transponder operation. At the receive side, the cancellation mechanism will cancel out the modem's own uplink signal in order to be able to demodulate the desired carrier.

PCMA Canceller Tab

The Paired Carrier Multiple Access (PCMA) Hub Canceller is a satellite signal canceller that maximizes the capacity of satellite networks by using PCMA technology to reduce satellite bandwidth as much as 50 percent. Accomplished by combining the uplink and downlink transmissions into the same bandwidth, it allows two different signals to overlap in frequency and increase the bandwidth available to the system. With the addition of a PCMA Hub Canceller to a hub, service providers can increase the efficiency of their bandwidth for the entire network and reduce operating costs.

Benefits

- Maximize network capacity with a satellite signal canceller that reduces satellite space segment costs and frees up bandwidth for new applications.
- Supports any network or market, especially in capacity-constrained regions
- Works with all modulation types and FEC coding in C- or Ku-Band
- Fast synchronization, easy operation and monitoring, and the highest spectral efficiency
- 30% gain in space capacity can be achieved for symmetrical links
- 100% gains are possible when an existing link is bandwidth limited (not using all available transponder power of the leased bandwidth)
- Considerable OPEX savings or deployment expansion by adding services within the same available bandwidth
- Applications include any point-to-point application, with the main usage in trunks and backhaul circuits, or to cancel the forward carrier
- in certain point-to-multipoint applications

DIALOG

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