

# NORSAT 5G INTERFERENCE SOLUTIONS - THE NUMBER ONE CHOICE FOR SATELLITE BROADCASTERS IN CHINA

*5G interference signals are powerful enough to saturate sensitive C-band satellite receiving systems, causing a potential for total loss of service for broadcasters. Norsat's 5G interference solutions facilitate China Jiangsu broadcasting company sets of communications solutions to prevent 5G interference on current broadcasting stations.*



## Background

Jiangsu Broadcasting Cable Information Network Corporation Limited, (JSCN) is a leading broadcaster in China. Founded 2008, JSCN has developed themselves as the leader of Jiangsu province's radio and television network, Cloud Media (Smart TV), cable TV operation, Ultra HD (live broadcast), Broadband Data service, digital TV value-added services (basic and paid channels) and Big TV (new media platform). It is headquartered in China's Nanjing, Jiangsu Province. China's mobile operators have made 5G services available to consumers, as the country seeks to become a global technology leader. 5G is the fifth generation of mobile internet connectivity. It promises much faster data download and upload speeds, wider coverage and more stable connections. The superfast service is now available to consumers in 50 Chinese cities, including Beijing and Shanghai, with more than 130,000 activated 5G base stations. This would make it one of the world's largest 5G deployments. With the onset of 5G in China, there is a need for specialized products to block or prevent interference from 5G base stations.

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## Challenges

Traditionally, C-band is used for satellite services, radar, and microwave links; however, with the terrestrial wireless industry's planned introduction of new mobile phone networks such as LTE, Wi-Max, and 5G, these C-band frequencies will now be shared amongst a wider range of services. 5G infrastructure is a new issue faced by broadcasters, especially 5G signal trials in seven different cities by China Unicom. JSCN broadcasting systems were facing a lot of interference, and users received blurred images and videos instead of clear transmission of TV programs. JSCN was rapidly losing the broadcasting and television users, and its core competitive advantage of clear broadcasting services was declining. This was because 5G in-band transmissions received by the broadcasting antennas drove regular LNBs into saturation and produced unwanted intermodulation products which degraded the desired signal from the satellite.



## Solution

Delivering exceptional broadcasting service was the main goal of JSCN. Norsat provided JSCN with the 3120C series LNB for its 4.5M broadcasting antenna, with special BPF-C band-pass filter to be inserted to the antenna for 5G interference. These BPFs can be easily installed between the feed and LNB and is suitable for use with existing Norsat C-Band LNBs. Moreover, these high-quality 5G band pass filters are environmentally sealed and moisture resistant (IP66), and feature a broad passband with low insertion loss, steep skirts that roll off quickly, and high stopband rejection. Adding Norsat's extensive 5G products strengthened JSCN's competitiveness for signal delivering. With the BPF installation in their antenna, JSCN has been able to deliver the exceptional broadcasting services in the province.

## Results

Besides just providing 5G interference mitigating solutions, Norsat offered on-site installation for JSCN to ensure that the BPF was installed properly and thoroughly. JSCN was satisfied with Norsat's 5G interferences solutions and services. The Norsat support team has been available to JSCN to provide trouble-shooting and operational support, ensuring every broadcast is timely and successful.

For more information about Norsat's 5G interference solutions, visit <http://www.norsat.com/5g-interference/>

## Why choose Norsat?

As the leader in satellite communication products and solutions, Norsat values its partners and distributors and is committed to providing them with the best products, service, support and large product portfolio to support all their customer requirements. For over 40 years, Norsat has worked closely with its stakeholders to provide standard or customized solutions to meet the exact requirements of their applications. Distributors prefer to associate with Norsat as we design and builds quality products and stand by them through extended warranties, quick turnaround time and excellent customer support.

