

SFD Roadmap: Upcoming Enhancements

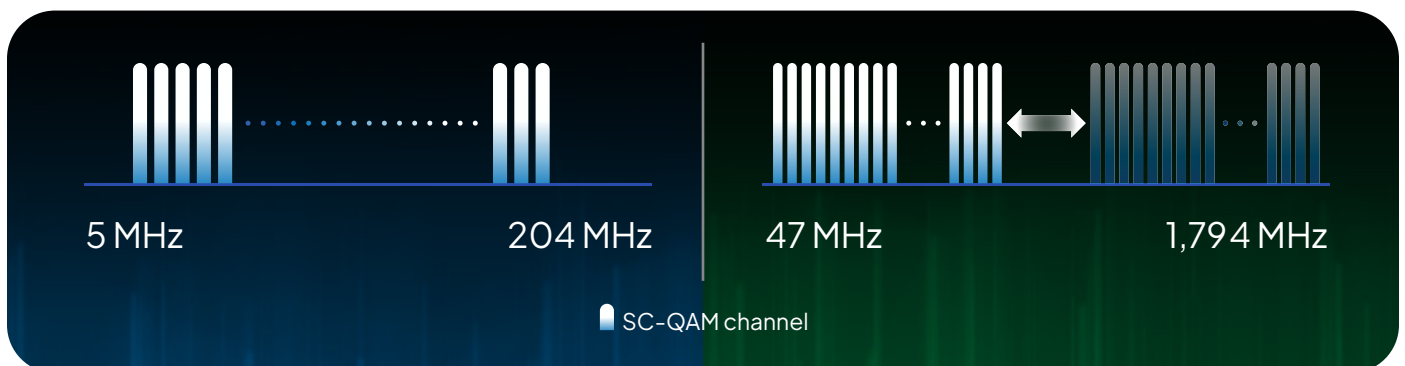


SFD-K302: Extended SC-QAM on Upstream Port

Cable network equipment manufacturers face increasing demands to validate upstream performance, interoperability, and signal integrity in modern DOCSIS environments. Traditional off-the-shelf tools often fall short in supporting SC-QAM signals in upstream frequency ranges. The SFD-K302 license addresses this gap by enabling the Calian SFD DOCSIS Signal Generator to output up to 32 consecutive SC-QAM channels through the upstream port, spanning 5 MHz to 204 MHz. This advanced capability provides a flexible, reliable solution for comprehensive lab and production testing – empowering teams to simulate real-world upstream conditions with precision and confidence.

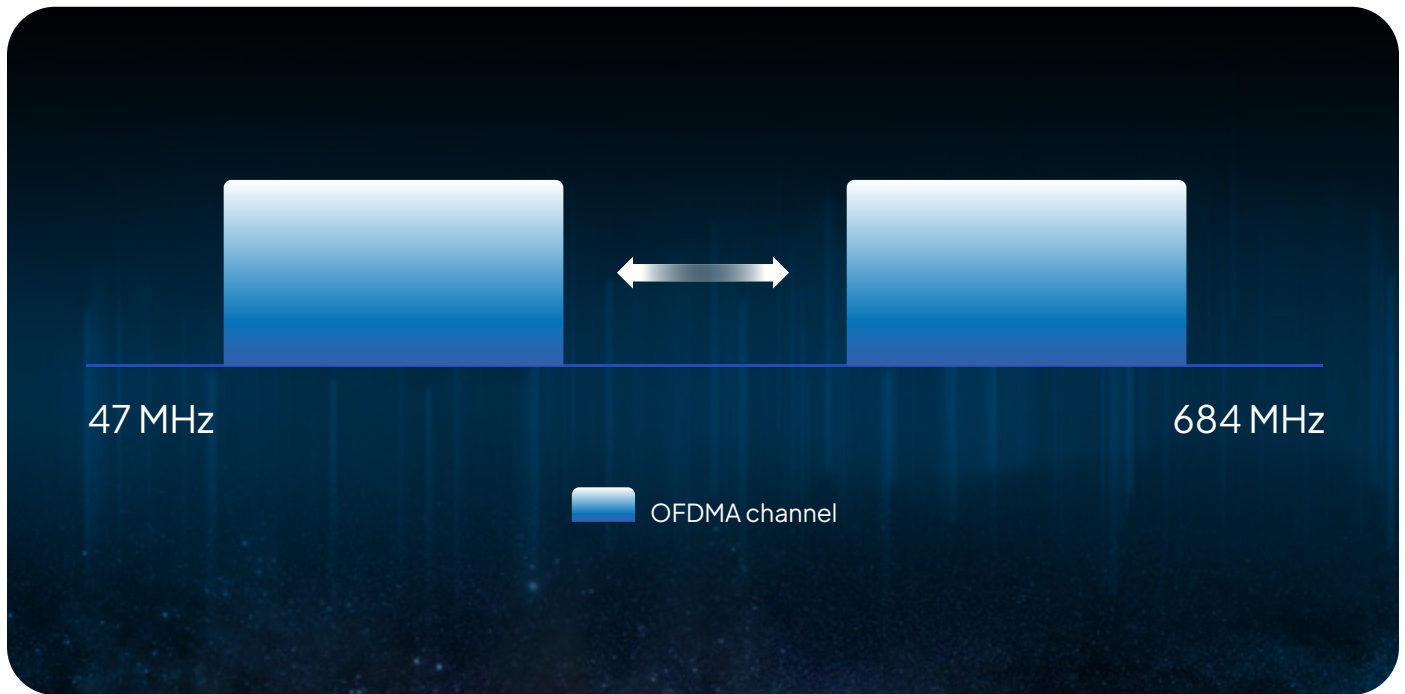
SFD-K252: Full Spectrum Extended SC-QAM

As cable networks evolve to support DOCSIS 4.0, testing across a wider frequency range becomes essential for ensuring equipment performance and signal quality. The upcoming SFD-K252 license expands the capabilities of the existing SFD-K202 Extended SC-QAM feature, enabling the generation of up to 96 consecutive SC-QAM channels from 47 MHz to 1,794 MHz. This broad coverage spans legacy bands as well as DOCSIS 4.0 Full Duplex (FDX) and Frequency Division Duplex (FDD) ranges, giving manufacturers greater flexibility to simulate real-world conditions and validate device behavior across the full spectrum.



SFD-K4018: OFDMA on Downstream Port

DOCSIS 4.0 introduces expanded upstream capabilities, including Full Duplex (FDX) and Frequency Division Duplex (FDD) modes, which demand more advanced testing tools to emulate real-world cable modem behavior. To meet this need, the SFD-K4018 license enables the Calian SFD to generate upstream OFDMA signals up to 684 MHz - enabling high-fidelity emulation of DOCSIS 4.0 cable modem transmissions. This enhancement supports robust validation of upstream performance, helping manufacturers ensure their equipment is ready for next-generation deployments.



Ready to elevate your DOCSIS testing capabilities with the Calian SFD?
Contact Calian today to learn more.