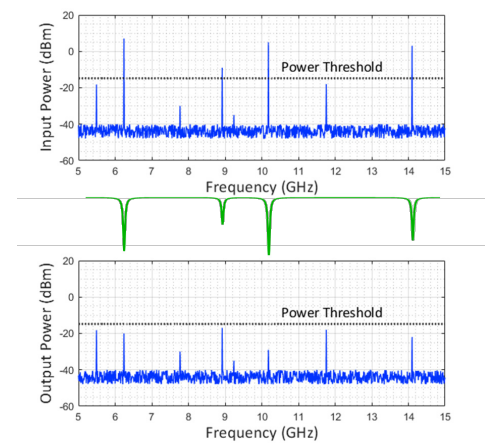


# The Jammer Hammer

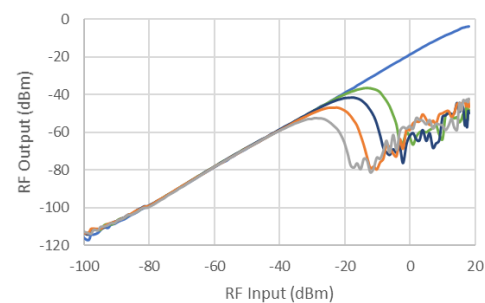
Protect your wideband receiver system from interfering signals and effectively increase the receiver dynamic range up to 10,000x.



Self-limiting notch filters decrease impact of interference



Input power threshold can be specified over a wide range



## What is the Jammer Hammer?

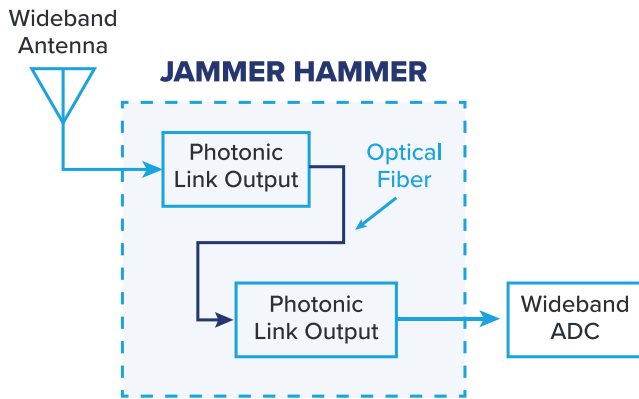
Modern warfighters face daunting challenges – obtaining the intelligence they need and communicating securely, especially in highly contested environments.

**The solution? Utilize high-performance microwave photonics to dynamically stay ahead at the tactical edge.**

CFD's Jammer Hammer protects your wideband receiver system from interfering signals and effectively increase the receiver dynamic range up to 10,000x.

The Jammer Hammer creates self-limiting notch filters for signals above a desired RF input power threshold. These notch filters increase in depth as the input signal power increases. The filters tune themselves in frequency as the input signal moves, and response time is less than 10 nanoseconds.

# Where can it be used?



The Jammer Hammer consists of a wideband high-performance microwave photonic link that can suppress 10 or more input signals simultaneously across a wide frequency range.

- Direct RF-to-RF operation from 0.1 to 8 GHz or 2 to 20 GHz
- Direct RF-to-RF or down-converted to an IF for 20 to 40 GHz

The photonic link enables low-loss signal distribution from antenna to receiver with fiber optic cables.

## Key Performance Specifications

Frequency Range	0.1 to 8 GHz, 2 to 20 GHz, 20 to 40 GHz
Instantaneous Bandwidth	Full Band
RF Input Power 1-dB Threshold	Adjustable from -60 to -10 dBm
Notch Filter Depth	0 to 40 dB
3-dB Bandwidth	56 MHz at 10 dB notch depth
Photonic Link Gain	25 dB
Photonic Link NF	9 dB
Photonic Link IP1dB	-10 dBm
Photonic Link OIP3	+24 dBm

Contact Critical Frequency Design  
to schedule a private demonstration.

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Critical Frequency Design (CFD) provides advanced photonics communications and sensing solutions for warfighters in contested airborne and terrestrial environments. Led by an agile, innovative team of experts across engineering, manufacturing, supply chain and program management, CFD possesses the knowledge and expertise to deliver mission-critical solutions to the warfighter. Learn more at [www.criticalfrequency.com](http://www.criticalfrequency.com)

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