

## Tech Note: Our New Favorite Wireless Modem *or: How I Learned To Stop Worrying and Love the Pepwave*

Comrex offers Connect modems for use in various parts of the world. They work very well. But their story is complex, mostly because of certification requirements for 4G/5G modems. Besides international and national approval testing requirements, many carriers also require any modem to be used on their networks to be certified by the carrier themselves. Even if a product contains an approved wireless module, the entire product must be certified by each and every carrier with these requirements.

Comrex has been able to squirm through these requirements on our Connect Modems, but at low volumes it can be perilous and expensive, with module manufacturers obsoleting their products every two years in favor of better technology.

As an example, the module used within the international variant of the Comrex Connect Modem entered End-of-Life status in 2022. This module had been available only since 2020.

Meanwhile, we've been evaluating a modem product line made by Pepwave called the Max Adapter. The Max Adapter is very similar to a Comrex Connect modem: it's an off-the-shelf module, equipped with supporting circuitry and antenna connectors. It works really well with our ACCESS codecs, and comes pre-certified for use on most carriers around the world.



*Pepwave modem connected to ACCESS NX*

The Max Adapter is available in several variants:

- **Global 5G:** Supports virtually all 4G bands worldwide and several sub-6 5G bands
- **Global 4G Cat 12:** slightly fewer 4G bands, no 5G, lower price
- **America Cat 12:** For those who need access to AT&T Firstnet (Band 14) in the USA

Like our Connect modems, the Max Connect products are simple modems, not routers. They connect to ACCESS products via USB only. They are powered via the USB cable and contain no battery or wifi capability.

At this point we feel the Pepwave products are a good alternative to Comrex Connect modems for use with our products. Comrex Connect modems should still be the choice for users who require things small and portable, especially for hand-held operation with modems attached. The Pepwave is a better choice for those who are looking for the ultimate in network compatibility and 5G operation. Pepwave modems will soon be available for purchase directly from Comrex.

Comrex ACCESS firmware 4.5-p13 and above support the Pepwave Max Adapter series.