



Our **Patent Pending Universal Pole Top Antenna Mount** is sure to be an industry game-changer - our latest small cell construction advancement – our Universal Top Mount PIM Gasket. Yes, a solution as simple as a gasket will eliminate the industry plague known as Passive Intermodulation; aka PIM.

### ***The Chemistry Behind the Problem***

You probably never thought something as “old tech” as corrosion on the pipes of your home water heater would have anything in common with a complex issue like Passive Intermodulation. PIM is very similar to plumbing corrosion because the two problems are caused by the same chemical reaction.



Water heaters typically use copper and steel piping. When two dissimilar metals are connected directly and in contact with water; they form a chemical reaction similar to that of a wet-cell battery. The electric current that occurs transits between the two metals causing atoms from one metal to break off and adhere to the other metal. The result is the powdery white buildup you see on the steel pipe. The plumbing solution for the problem is to install a dielectric union in the piping connection. A dielectric union is simply a non-conductive material that separates the two metals.

In the RF world, the corrosion acts like an RF modulator enabling the various RF signals that are present to add and subtract; creating new RF signals. Frequently those new signals will be coincident with the frequency of an existing communications channel, causing interference. E-Tech construction crews have observed this problem in the field numerous times with many different vendors mounting products.

ETechFRP product engineering minimizes this problem by separating the dissimilar metals with a non-conductive gasket. The ETechFRP PIM Protection Gasket is the RF version of a dielectric union.

When the true nature of a complex challenge is fully understood, ETechFRP product engineering provides elegant, inexpensive solutions.

At ETechFRP we engineer time-saving simplicity into our products that save you big \$\$\$\$. Our patent pending Universal Pole Top Mount, with the PIM Protection Gasket is the latest E-Tech product engineered to reduce construction time and lower the cost of your small cell buildout projects.

