

On-Board Units: What Every Deployment Should Know

SUCCESSEUL VEHICLE TO EVERYTHING DEPENDS ON INDEPENDENT TECHNICAL OPINIONS

ABOUT THE AUTHOR

How Well Do You Know Your OBUs?

Let's discuss the numbers first:



See a problem here? A small vendor market with no independent reviews. A successful V2X deployment should not hinge on referrals or limited-options. Only independent opinions of technical experts who have worked with multiple OBUs can help address the short-falls, *before* procurement.

It's a fact: not all the OBUs or antennas are the same. There are some that perform better than others.

Unfortunately, project managers don't always get the full picture when working with a vendor. Who can blame them? With so few options, and so much paper work to go through, it's hard to get a trusted opinion from vendors who are biased to their products and colleagues who have little exposure themselves.

Things to remember when sourcing an OBU:

- Is cyber-security a business directive of the OBU vendor?
- 2. Is the OBU certified?
- 3. Does the vendor have great customer service and tech support?
- 4. Does the OBU allow OTA updates?
- 5. Do all applications (not hardware) perform as expected in severe heat?
- 6. Is the application boot-up time short, regardless of GPS coverage?

For antennas remember:

- 1. Not all antennas are the same.
- 2. Be sure that the antenna specs are reviewed by an expert.
- Ensure the antennas are tested on the deployment platform.
- Reception issues can be due to the antenna or OBU. Test both.





Billy Kihei, Ph.D.

ReachRF Founder

Billy is an active researcher and consultant in the connected vehicle arena. He is an expert in Vehicle-to-Everything (V2X) networks and has assisted US deployments. He is a member of the IEEE, SAE, an NSF Awardee, cyber-security advocate, internationally invited speaker, and published author in prestigious wireless communication technical venues.

<u>Contact ReachRF</u> *today* to discover how ReachRF LLC can help you **Go Further**, **Reach Further** in a mobile connected world.

It is a fact: not all the OBUs or antennas are the same.

There are some that perform better than others.