

Covert, High Bandwidth RF Comms

Whisper is a covert, high-bandwidth 60 GHz (WiGig) RF communications technology with inherent LPI/LPD characteristics. The technology leverages WiGig, also known as 60 GHz Wi-Fi, a high-bandwidth, commercially available wireless standard (IEEE 802.11ad AND 802.11ay). Use of this standard avoids proprietary hardware/RF protocols like ultrawideband and optical solutions while still demonstrating exceptional performance, with speeds up to 7Gb/s being demonstrated.

American-Designed & American-Made

Whisper was designed by American engineers and is assembled in CTI's Dublin, Ohio facility. The technology is highly relevant in the modern operating environment allowing end-users to remain covert in the presence of near-peer adversaries and dominate the Invisible Battlespaces.



Extremely Small Form Factor

High frequencies, like those used by Whisper, require very small antennas/space claims. This is advantageous because not only is the waveform covert, but so is the complementary hardware due to its small form factor – making it easier to carry and conceal.



Small Form Factor Antennas and Transceivers

Rugged Design

Whisper has been designed with a variety of use-cases in mind (e.g., Wireless Personnel Area Networks [WPANs], Intra-Vehicle Comms, etc.), each of which requires a rugged design to survive in the modern operating environment.



CHARACTERISTICS

Waveform

WiGig 60 GHz Wi-Fi

- ▶ IEEE 802.11ad
- ➤ IEEE 802.11ay

Speed

Up to 7+ Gb/s

Encryption

Unencrypted, AES 128, or AES 256

Beamforming Capability

- Increased Reliability
- Better LPI/LPD
- Not subject to Humidity
- Not subject to Dust

Vs. Lower RF Frequencies

- Much Higher Bandwidth
- > Inherent LPI/LPD

Example Use Cases

- Soldier Wireless
 Personnel Area Networks
 [WPANs]
- Intra-Vehicle Wireless Communication Networks
- Covert, high-bandwidth wireless data transfers (e.g., "Wireless Dead Drop" scenarios).



