

Multi-Speed TDMA

XetaWave has developed an innovative version of Time Division Multiple Access (TDMA) - **Multi-Speed TDMA**. As with all TDMA schemes it enables the enforcement of timing schedules based on the movement of data. Unlike most TDMA schemes, XetaWave allows a *single* radio to have multiple logical data channels with different speeds. This allows for the prioritization and trade off of reliability versus speed.



Enclosed versions also available

Slower data speeds = higher reliability & longer distances

Faster data speeds = lower reliability & shorter distances

A single XetaWave radio can combine a slow 114 kbps data channel for long range communication with another high speed complex modulation channel running at 2.6 Mbps. XetaWave is the only provider within the industry offering a “multi-speed” TDMA capability.

Two Applications Within a Single Radio Module

Using XetaWave's Multi-Speed TDMA, a UAV application can have a long range high reliability command and control link AND a similar long range high reliability telemetry link. The downlink logical channel can be transmitted to many possible ground stations. For a UGV application, one or two logical channels can be added to transport audio in either or both directions.

Additional features of XetaWave's **Multi-Speed TDMA**:

- Supports thousands of radios (frames) making it ideal for soldier training systems
- Each frame is programmable for transmit, receive, idle, sleep or acknowledgement
- Synchronize using GPS (1PPS), RF, or both
- No forced frame casings
- One to a few command and control points with many data points

Multiple Frequencies & Form Factors Available

XetaWave's **Multi-Speed TDMA** is offered on *a//*XetaWave serial radios and form factors (enclosed, board level, module). XetaWave offers the broadest range of frequencies available on the market, both licensed and unlicensed.

Contact XetaWave for additional information.

Specifications subject to change without notice. 11.2022