

RF over Fiber

RF over Fiber is the method of converting a radio wave (RF) into light by modulating the intensity of the light source (typically a laser) with a RF signal. This is an analog process and no digitization is used. The light signal is then transmitted over a fiber optic cable, which replaces an exceeds the capabilities of traditional copper coax cable. Fiber is not distance limited like coax which only goes to 300 ft.

Fiber applications:

- GNSS: Fiber is ideal for the signal extension and distribution of GPS signals for navigation and Precision Network Timing (PNT).
- SATELLITE EARTH STATION: From the control room to the antenna.
- SATCOM TIMING & REFERENCE: Distribute a 10 MHz central timing or modem produced reference signal to remote locations in satcom antenna installations.

Fiber features:

- Security against signal interception
- Cost effective compared to high end, low loss coax cable
- 99.999% reliability
- Five (5) year warranty
- Provides lightning protection
- Redundancy