

## ION-M2m1 Operation Description

The ION-M2m1 is a fiber optic based RF repeater for wireless applications. An RF signal is converted to an optical signal by directly modulating a laser. There is no frequency conversion in this system.

The optical signal is converted back to RF at the ION-M remote unit, amplified and broadcast from an antenna or into a passive RF distribution system, such as radiating cable.

The RF gain in the system is maintained at a constant level throughout the system via AGC and the user does not need to adjust the gain of the system. The user would inject an RF signal to produce the appropriate RF output power from the ION-M remote unit. The receive path will always terminate in an RF source, such as a base station or repeater, and will not be directly connected to any antenna.