

Antenna Installation

- All Antenna Installation to be performed by Qualified Technical Personnel only.
- Antenna Installation Instructions and locations below are for the purpose of satisfying FCC RF Exposure Compliance requirements.
- **Note that if multiple LinkNet™ Modules are used, the Instructions below apply to the composite power output of all Modules when transmitting simultaneously.**
- The ***Roof Top Antenna or Antennae*** for linking to the *Donor Site(s)* is/are directional (high gain) Antennae, fixed-mounted physically on the side or top of a building, or on a tower. The Antenna Gain must be no more than 20 dBi. **If multiple LinkNet™ Modules are used with output combiners into any one Antenna, and/or multiple Antennae are used on one Roof Top, then the sum of composite powers into all Roof Top Antennae must not exceed 20 Watts maximum.** Please consult Kaval Wireless for assistance as required. The *Roof Top Antennae* location should be such that only Qualified Technical Personnel can access it, and that under normal operating conditions no other person can touch the Antenna, or approach within 10 meters of the Antenna.
- For the ***Cellular Uplink Band*** (824-849 MHz) the *Roof Top Antenna or Antennae* for linking to the *Donor Site(s)* has the added restriction that the Effective Radiated Power (ERP) must not exceed 7 Watts (+38 dBm). Thus, if the AGC is set (as per the Carrier De-Rating Chart) to +28dBm as an example, the maximum allowed Antenna Gain must be no more than 10 dBi.
- The ***In-Building Antenna*** connection is via a coaxial cable distribution system with Signal Taps at various points connected to the fixed-mounted *Indoor Antennae*. This is shown in the figure in the Introduction. The *Indoor Antennae* are simple 1/4 Wavelength (0 dB Gain) types. They are used with KAVAL WIRELESS TECHNOLOGIES 12, 16, or 20 dB Cable Taps. As such the maximum EIRP will be at the first Tapped Antenna, which will be 12 dB below the maximum signal level of the LinkNet™ (+40 dBm); +28 dBm, or 0.63 Watts EIRP. **If multiple LinkNet™ Modules are used with output combiners, then the composite power output of all Modules transmitting simultaneously must meet this maximum EIRP requirement.** Please consult Kaval Wireless for assistance as required. These Antennae are to be installed such that no person can touch the Antenna, or approach within 0.2 Meters.