

Antenna Information

Due to the low-power operation of this Automatic Vehicle Monitoring System, directional antennas must be used. At the moment, four antenna types are being considered for operation in both 900 MHz and 2400 MHz bands:

- (1) Yagi with a 10 dB gain.
Beam width at the half power points = 45 degrees.
Orientation in the vertical and horizontal planes = variable.
- (2) Para-panel with a 9.5 dB gain.
Horizontal beam width = 75 degrees.
Vertical beam width = 28 degrees.
Orientation in the vertical and horizontal planes = variable.
- (3) PCB Log Periodic Antenna with a 6 dB gain.
Horizontal beam width = 60 degrees.
Vertical beam width = 90 degrees.
Orientation in the vertical and horizontal planes = variable.
- (4) Universal Toll Antenna with a 13 dB gain.
Horizontal beam width = 32 degrees.
Vertical beam width = 35 degrees.
Orientation in the vertical and horizontal planes = variable.

The antennas will be mounted variously during the experimentation, and therefore their orientation will vary.