Omnidirectional (Omni) Antenna Summary

350 Beth Bartel July 6, 2009 Comms Antennas 2759

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Omnidirectional Antennas have an equal gain pattern all around and will thus receive and transmit equally well from all directions barring any physical obstructions or electromagnetic interference. The omnidirectional antennas generally have less gain compared to the directional antennas (Yagis) and are best suited for sites where signals come from more than one direction, e.g. a radio repeater site. Omnidirectional antennas can be used with considerable success in combination with one or two directional higher gain antennas.

The UNAVCO Boulder Facility has used the following omnidirectional antennas with radio modem/transceiver sites:

- 12" omnidirectional antenna with bracket mount with radials, 890-940Mhz, 3dB gain, FreeWave part number EAN0900WB
- 33" omnidirectional antenna, no ground plane required, 896-940MHz, 5 dB gain, Maxrad part number MUF9115

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