



Antenna Registration Question 4: Directional Antenna Information

A. Transmitting antennas

Quantity: Each demonstration system will consist of one each of Antenna 1 and Antenna 2. Alternate antennas 3 and 4 may be used in exceptional circumstances. The application is for authorization of up to ten such systems simultaneously in various locations throughout the applied-for service area.

Antenna 1: N Systems model 23FA2Q quad-pol feed assembly

Antenna 2: Radio Waves model 2A20SS quad-pol feed assembly

The specifications for these antennas are the same:

Gain:	10dBi
Half-power beamwidth:	60°
Polarity:	Selectable H, V, RCP, LCP

These feeds are more commonly used with parabolic reflectors as part of a high-gain antenna assembly having a gain of 20dBi and HPBW of 14° in the horizontal plane. This application calls for use of the feed assemblies only, for a more compact form factor. High gain is not called for, due to the very short, indoor paths being used for these training demonstrations.

Alternate Antenna 3: Radio Waves model 100552-112 omni antenna

Gain:	2dBi
Half-power beamwidth:	360°
Polarity:	V

Alternate Antenna 4: Radio Waves model 100560-112 horn antenna

Gain:	13dBi
Half-power beamwidth:	40°
Polarity:	RCP

Information common to all antennas:

Location:	Indoor use only
Support structure:	Mounted to mobile equipment case
COR height:	6' above floor level



B. Receiving antennas

Quantity: Up to 10 (one per training system)

Model: N Systems CRS2 Steerable Receive Antenna

Gain:	20dBi
Half-power beamwidth:	14° (horizontal plane)
Polarity:	Selectable H, V, RCP, LCP