Remote Unit Antennas

This section describes the **WaveACCESS NET xDR232** antenna options, as follows:

- n Internal Antenna.
- n External Antenna.

For more information about antenna options and specifications, refer to page 7-5.



NOTE:

All of the **WaveACCESS NET** outdoor antenna options must be professionally installed, **in compliance with the certified antenna kits**. Please carefully review and follow the installation instructions included with each individual antenna kit. If you have any questions, please contact your nearest Technical Support center. Refer to *Chapter 8, Technical Support*, for details.

Internal Antenna

The **xDR232** is equipped with an internal antenna (16 dBi). Its beamwidth is 23° horizontal and 24° vertical.

External Antenna

The external antenna available for the **WaveACCESS NET** remote units is the parabolic grid antenna (PG24). This is the highest gain antenna available for the **WaveACCESS NET** remote units. It is recommended for long range situations.

Careful aiming of this antenna is required due to its small coverage angle.

The following table provides the physical characteristics of the **WaveACCESS NET** antennas:

Table 7-2 Physical Characteristics of the WaveACCESS NET Antennas

Antenna Type	Gain	Catalog No.	Size (inches)	Beamwidth Horizontal/ Vertical	Mast Outside Diam. (inches)
Parabolic Grid	24 dBi	PG24	27 x 32	10° / 10°	0.75 - 2

Antenna Options and Specifications

Table 7-3 to Table 7-5 display the antenna options and their specifications. These figures assume the following:

- n A line of sight between the receiving antenna and the transmitting antenna.
- A 6-10 dBi fade margin over ideal free space propagation and use the shortest permitted cable. Up to a distance of 10 km the fade margin is 6 dBi.
- The use of a LMR 400 of 8 ft when connecting to an external antenna.