

Donor Panel Antenna

1. General description

Cellvine provides a unique, slim and well-designed donor antenna in the repeater kit, instead of a regular Yagi antenna. This antenna is designed to provide attractive appearance and smaller dimension when installed in private homes or public places. The solution is based on a panel antenna with a narrow beam pattern of 24°.

The advantages of this antenna are being aesthetically more appealing, lightweight, relatively small dimensions, and simple installation. Although this is a panel antenna, it performs much better than other panel antennas with similar dimensions, especially in the pattern beamwidth (see Figure 3). The antenna gain is 9 dBi.

The antenna is designed to be mounted on a glass window, connected to front window bracket with two-sided adhesive tape. For the adhesive tape specifications, please refer to User Manual

2. Mechanicals

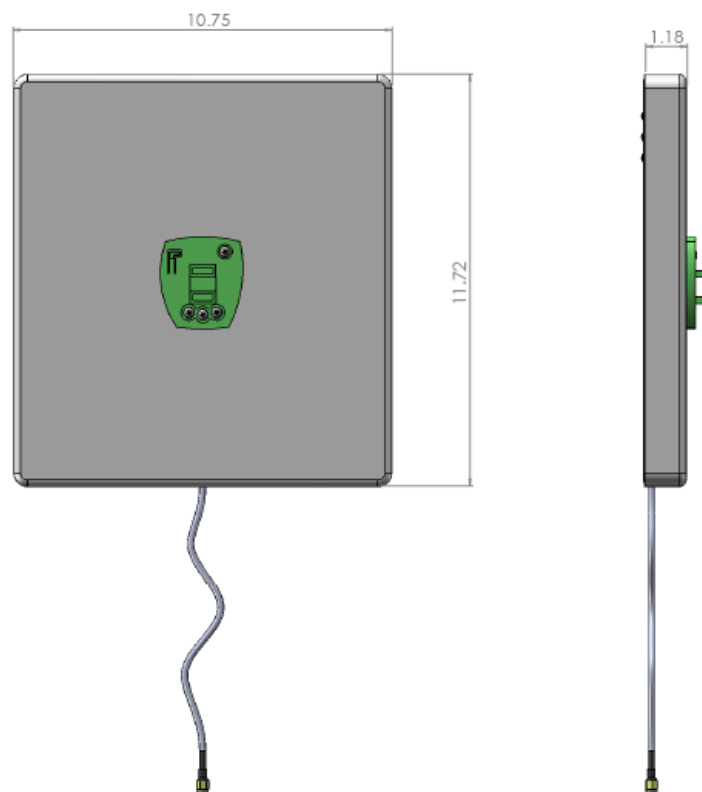


Figure 1: Donor panel antenna dimension in inches

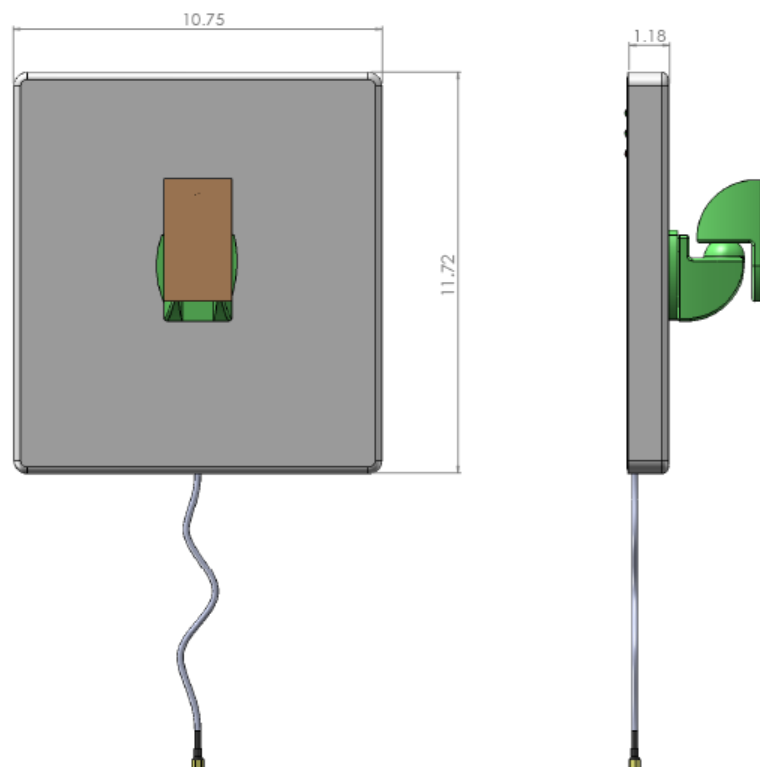


Figure 2: Donor panel antenna dimension in inches with front window bracket

3. Donor antenna unit specifications

Frequency range	2500-2700 MHz
Directivity	9 dBi
VSWR	1.8:1 (typical)
3 dB Beam width	24° X 24°
Polarization	Linial
Input impedance	50 (ohm)
F/B ratio	20 dB (typical)
Input power	10W
Size	307X277X30mm
Weight	2 Kg

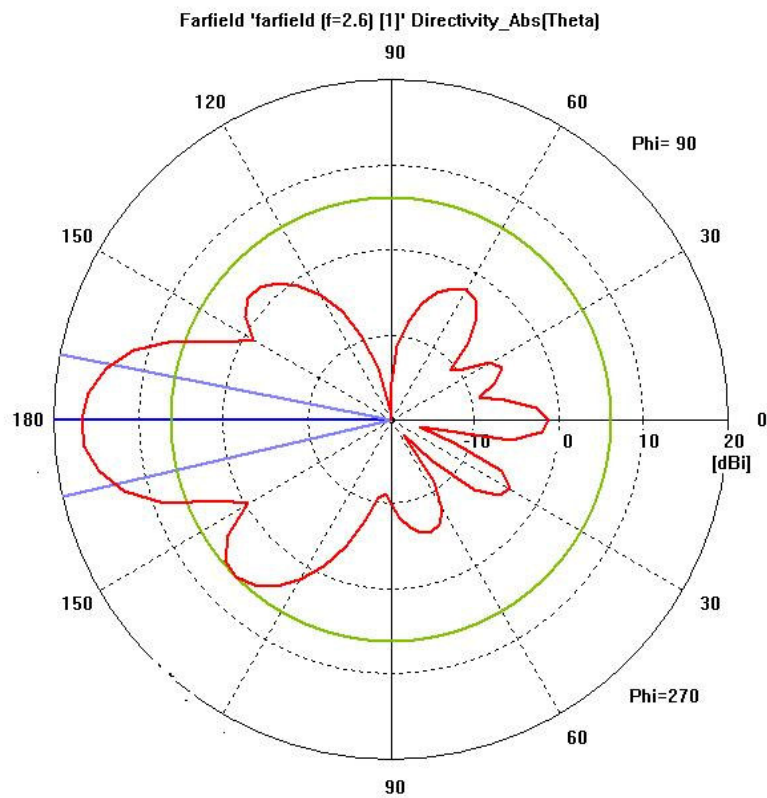
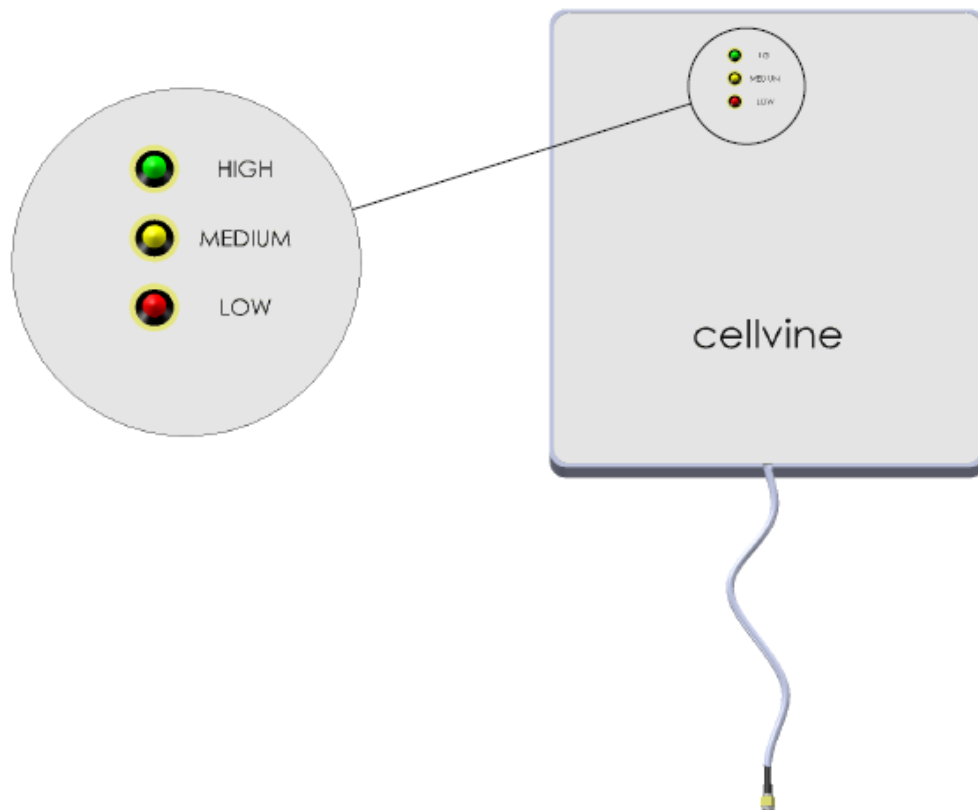


Figure 3: Donor antenna radiation pattern

4. Donor Signal Strength Measurement Tool

The donor panel antenna includes a signal level meter indicator for measuring the RSSI signal level from the donor BTS in the neighboring area.

The measurement tool receives a signal from the repeater controller through the coax cable connected to the donor antenna. It measures the signal output level of the repeater output according to the signal received at the donor antenna from the BTS. This will help installing the donor antenna in the optimal direction and at the optimal angle, in order to achieve the highest RSSI level signal from the BTS.



Donor signal level measurement tool