

Antenna Specification

Model: ES DS1A

Vtech Telecommunications Ltd.

June 24, 2026

1 Antenna Description

This wire Monopole antenna is optimized and used in the door sensor unit. This antenna is directly soldered to the ZigBee RF output in the main PCB.

Model Number	Description
ES DS1A Antenna	2.4GHz Monopole

Table 1: Antenna Model Information

2 Specifications

Parameter	Value
Operation Frequency Range	2402 to 2480 MHz
Maximum Gain	0 dBi
Type	Monopole
Operation Bandwidth	100 MHz
Normal Impedance	~50 ohms
Manufacturer	Vtech Telecommunications Ltd.
Manufacturer address	23/F, Tai Ping Industrial Centre, Blk 1, 57 Ting Kok Road, Tai Po, Hong Kong
Model number	ANT-ES-DS1A-ZB-0

Table 2: Technical Specifications

2.1 Frequency and Orientation with Maximum Antenna Gain

Test Frequency: 2440 MHz

	Vertical	Horizontal
Antenna Gain (dBi)	0	-2.13

Table 3: Antenna Gain at 2440 MHz

3 Antenna Pattern

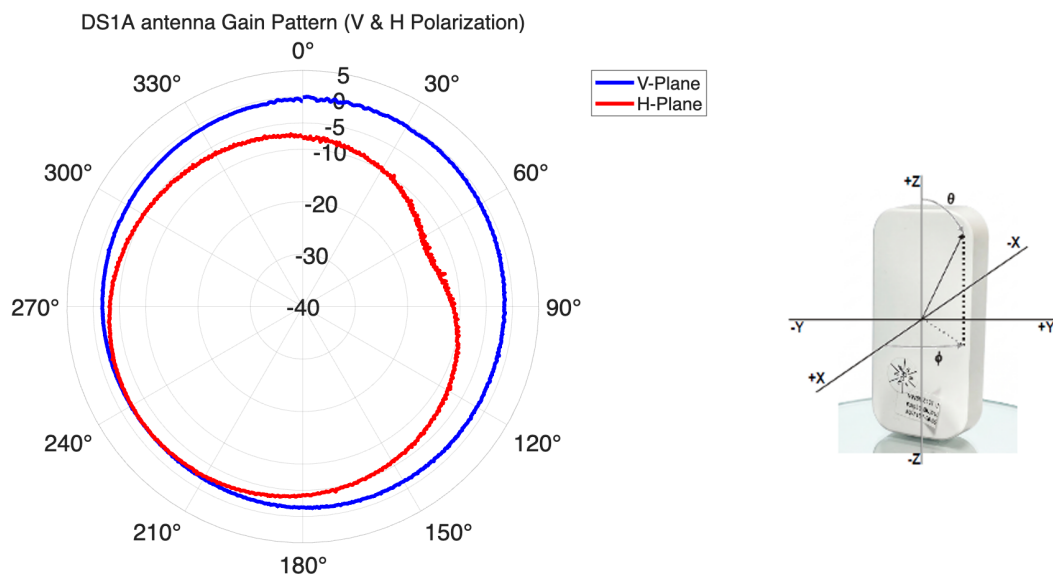


Figure 1: Antenna Radiation Pattern

4 ES DS1A Antenna Dimensions

All dimensions are in millimeters (mm).

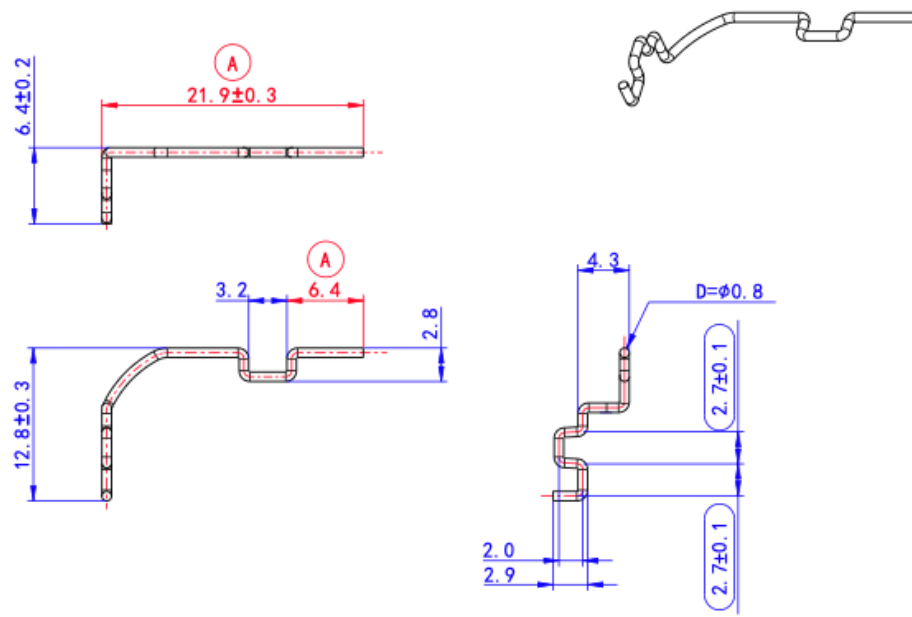


Figure 2: Antenna Dimension - View 1