Butterfly-DVB T2-1 antenna (passive), for receiving DVB-T2 signals (380-900 MHz)
also for 330-3000 MHz signals (SDR radio receivers)

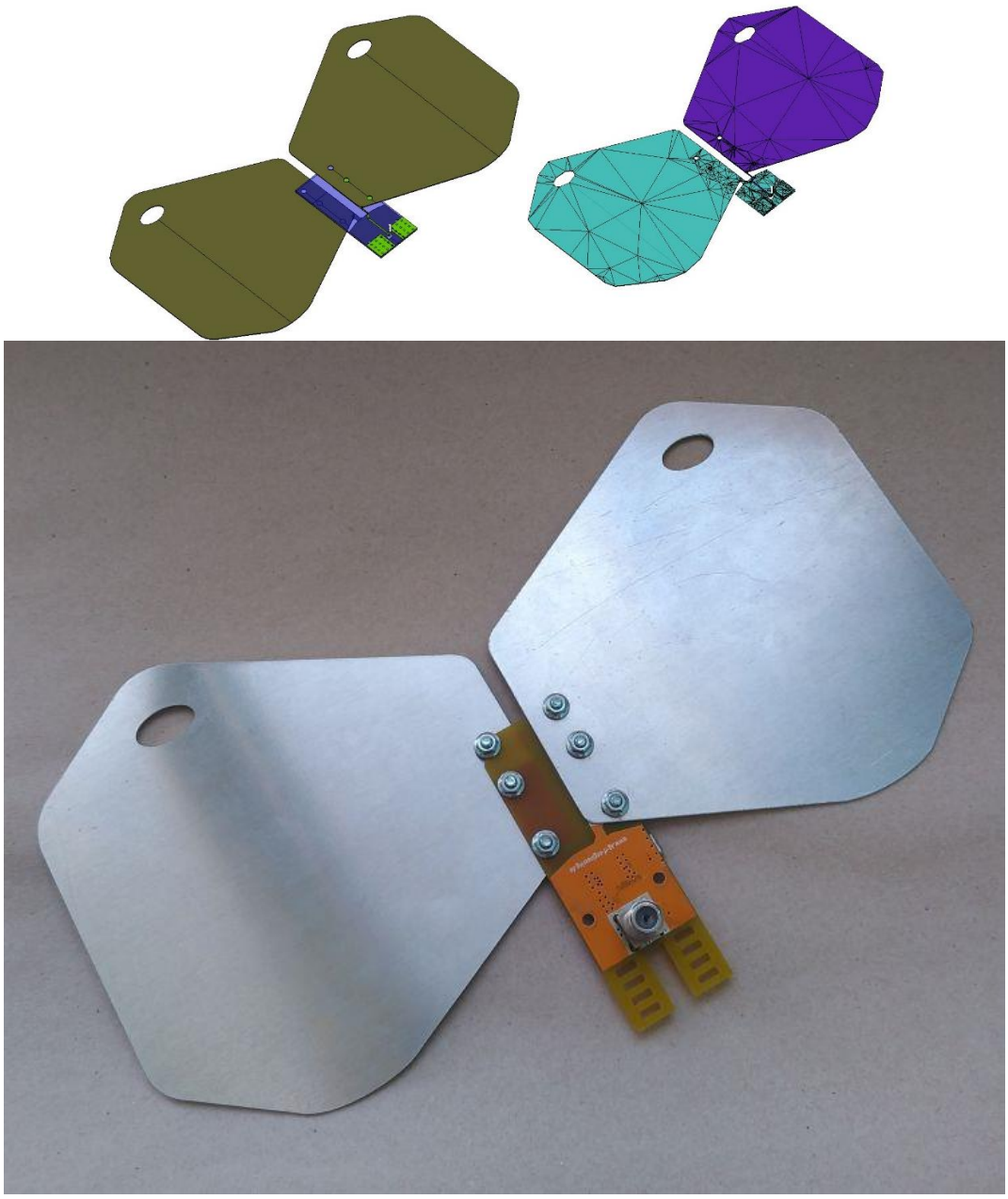

Figure 1 Antenna 3D EM Model and Photo

General information:
This antenna is designed for optimal reception of T2 digital television or any other RF signals between 330 and 3000 MHz (GSM, WiFi, T2 (). The antenna has a very slender shape, uses a thin material. It has an innovative conceptual modern design, can be mounted horizontally or vertically (placed on the wall, mounted on a pipe or rack on the table (mounting means-1)), placed directly on the connector of the device. The device is still designed for indoor **use.**
Застосування: DVB-T2 та інших сигналів, що працюють в діапазоні частот (380-900 МГц)

Application: DVB-T2 and other signals operating in the frequency range (380-900 MHz)

Features:
• Small, compact size compared to other antennas (possibility of mounting the antenna on a vertical plane with 2 upper holes)
• Possibility of fastening on a pipe or a rack

- High efficiency
- Broadband frequency range
- Ability to integrate connectors of different types of SMA, RP-SMA and F-connector
- Modern design
- Ability to attach the antenna to the T2 receiver without wire, using metal adapters

Specification:

- Resistance: 75 (or 50) Ohms
- Dimensions: 160x260x4mm (without connector)
- Operating frequency range (S11 less than -5dB): 330 to 3000 MHz
- Gain: up to 2-5 dBi
- Type of radiation: torus - on the frequency DVB-T2
- Matching (reflection coefficient S11): better than -8 dB in the DVB-T2 band
- Connector type: F-type (+ TV adapter) or SMA
- Polarization type: horizontal (antenna has a marker)
- Beam width: 80 ° / 360 ° - at a frequency of 700 MHz

Typical characteristics in the frequencies of reception of the DVB-T2 signal

Frequency Range (MHz)	Max Gain (dBi)	Return Loss (worst case in band) (dB)	Impedance (Ohm)	Operating temperature (Celsius degree)
DVB-T2, 380-900	3.0 (Peak)	-8	75	-30 to 55
SDR receiver 330-3000	3.0 (Peak)	-5	50	-30 to 55

Types of characterization (T=25 °C)

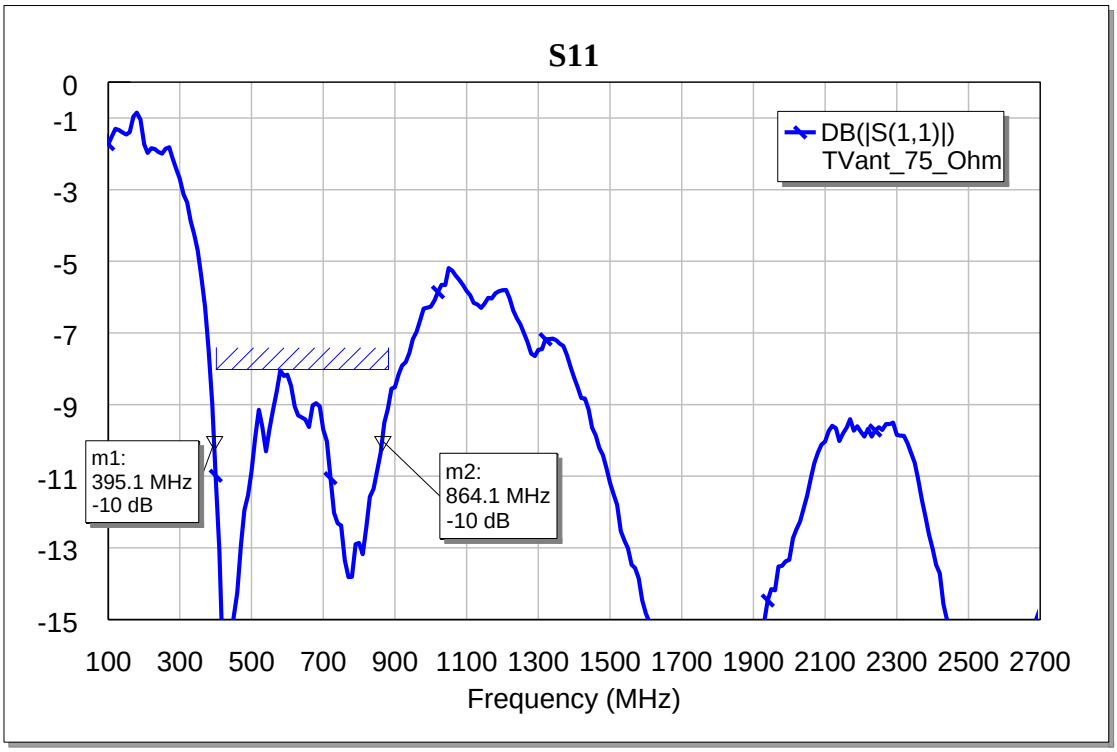

Figure 1 Antenna Matching (S11 – 75Ohm) vs Frequency, dB, Вимірювання

Precautions

Caution! Be careful when using and installing this antenna. Install the antenna on a stable surface eliminates the fall of the antenna. Do not allow the antenna to fall, when falling, the device may harm health. Install the antenna in an out-of-reach location. Handle the edges of the antenna carefully. do not allow cuts and impacts by the device, so as not to harm health or other objects and surfaces. Do not ingest the antenna, it can lead to edification and deterioration of electrical contacts. When installing the antenna, use a stable staircase to prevent the installer and antenna from falling. Set the antenna not above people's location.

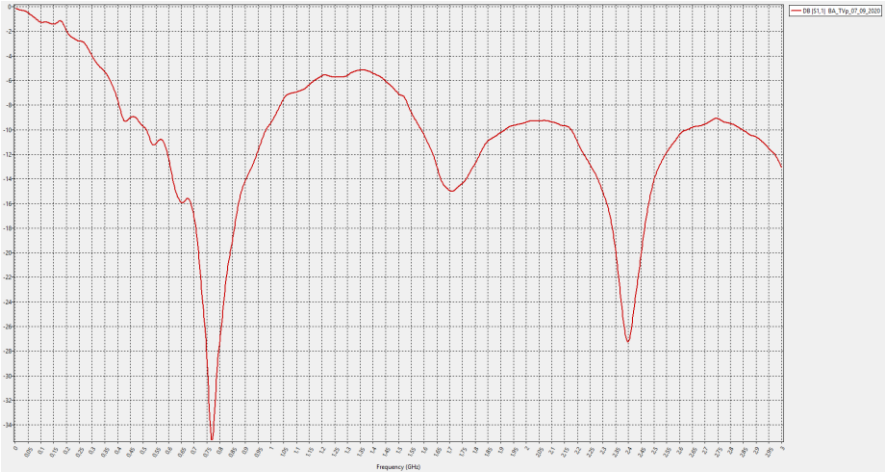

Figure 3 Antenna Matching (S11 – 50Ohm) vs Frequency, dB

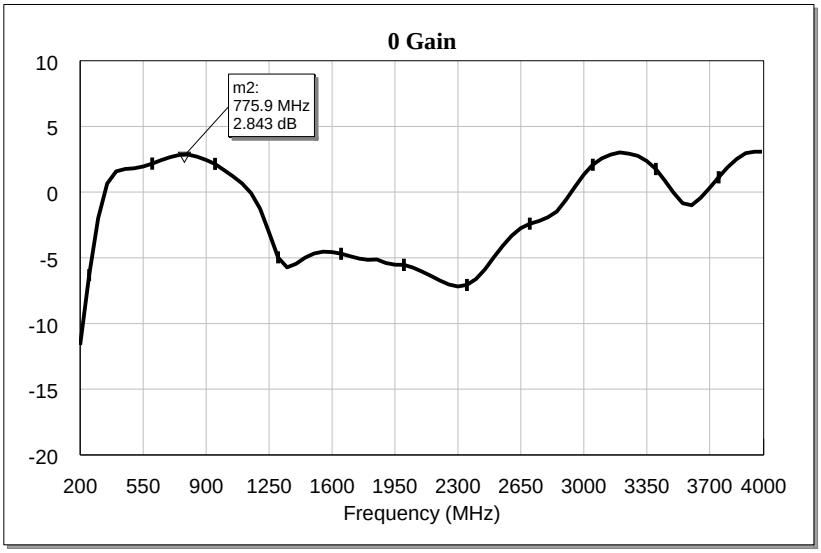

Figure 4 Antenna Gain, dBi

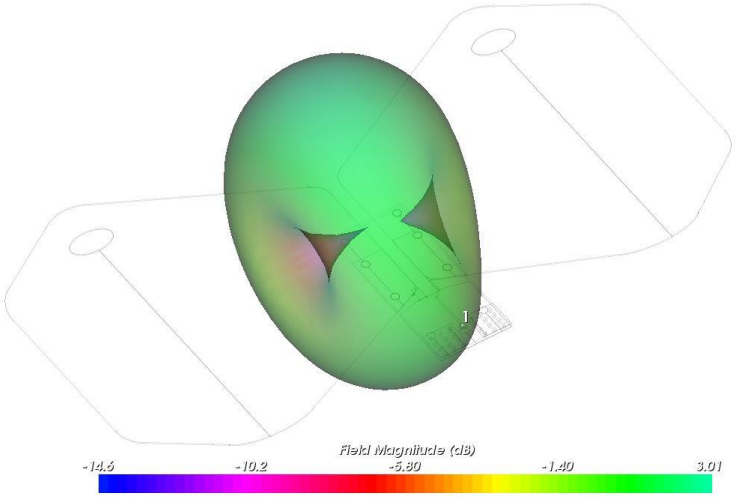

Figure 5 Antenna Radiation Pattern - 700 MHz Gain max = 3dBi

Equipment and assembly

- PCB with F-type Connector F-type on TV (for tuner)
- Adapter TV-TV corner – for positioning of the antenna
- Wings metal – 2 pcs.
- M3-8 screws and M3 lock nuts – 8 pcs.
- Fastener-1 with holes M3-M5
- Documentation

Wings to the PCB should be fastened to metal pads of the PCB! (Select the right PCB side)

Contacts and Support

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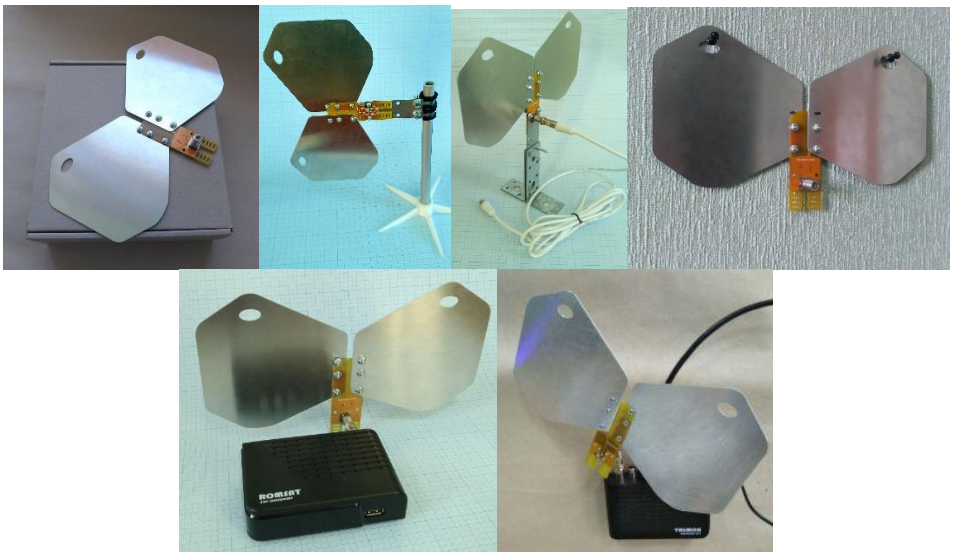

Figure 6 Antenna photo – installation examples