

# DRONE DETECTOR **DTS-CaDe**



## GENERAL DESCRIPTION

This portable, single-user drone detection system conveniently fits in a MOLLE pouch for easy carrying. Equipped with a wide detection range, the **DTS-CaDe** utilizes advanced AI to identify and locate drone and controller signals, keeping you informed of potential threats.



## FEATURES

- Easy to use
- Portable, robust and durable housing
- Graphical and headless UI
- Modular omnidirectional antenna
- Internal directional antennas
- High input gain (20dBm+)



## APPLICATIONS

- Drone detection
- Spectrogram visualisation
- RF Signal analysis
- Drone/remote positioning
- RF signal positioning



## RF information

| Parameter                   | Value           |
|-----------------------------|-----------------|
| Wifi monitoring frequencies | 2.4 GHz & 5 GHz |
| RF frequency range          | 100 MHz - 8 GHz |
| Detection range             | 2-4 km          |

## Antennas

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| Parameter                        | Value                                                       |
|----------------------------------|-------------------------------------------------------------|
| Internal directional antenna     | 2.2 – 2.7 GHz & 5.1 – 5.9 GHz                               |
| External omnidirectional antenna | 433 MHz, 900 MHz, 1.1-1.4 GHz, 2.2-2.7 GHz, and 5.1-5.9 GHz |

## Power parameters

| Parameter         | Value                      |
|-------------------|----------------------------|
| Battery life      | 12 h                       |
| Battery charger   | Type-C fast charging (60W) |
| Power consumption | 5 W                        |
| Charging time     | 1.5h                       |

## Physical specification

| Parameter              | Value        |
|------------------------|--------------|
| Dimensions (W×D×H)     | 90×45×140 mm |
| Weight                 | 660 g        |
| Operating temperature  | -25...+40 °C |
| Environment resistance | IP67         |

## Miscellaneous

| Parameter         | Value                         |
|-------------------|-------------------------------|
| Connection type   | Type-C                        |
| Notification      | LED, vibration and headphones |
| Attachment method | MOLLE                         |
| Country of origin | Estonia                       |

## Attenuators



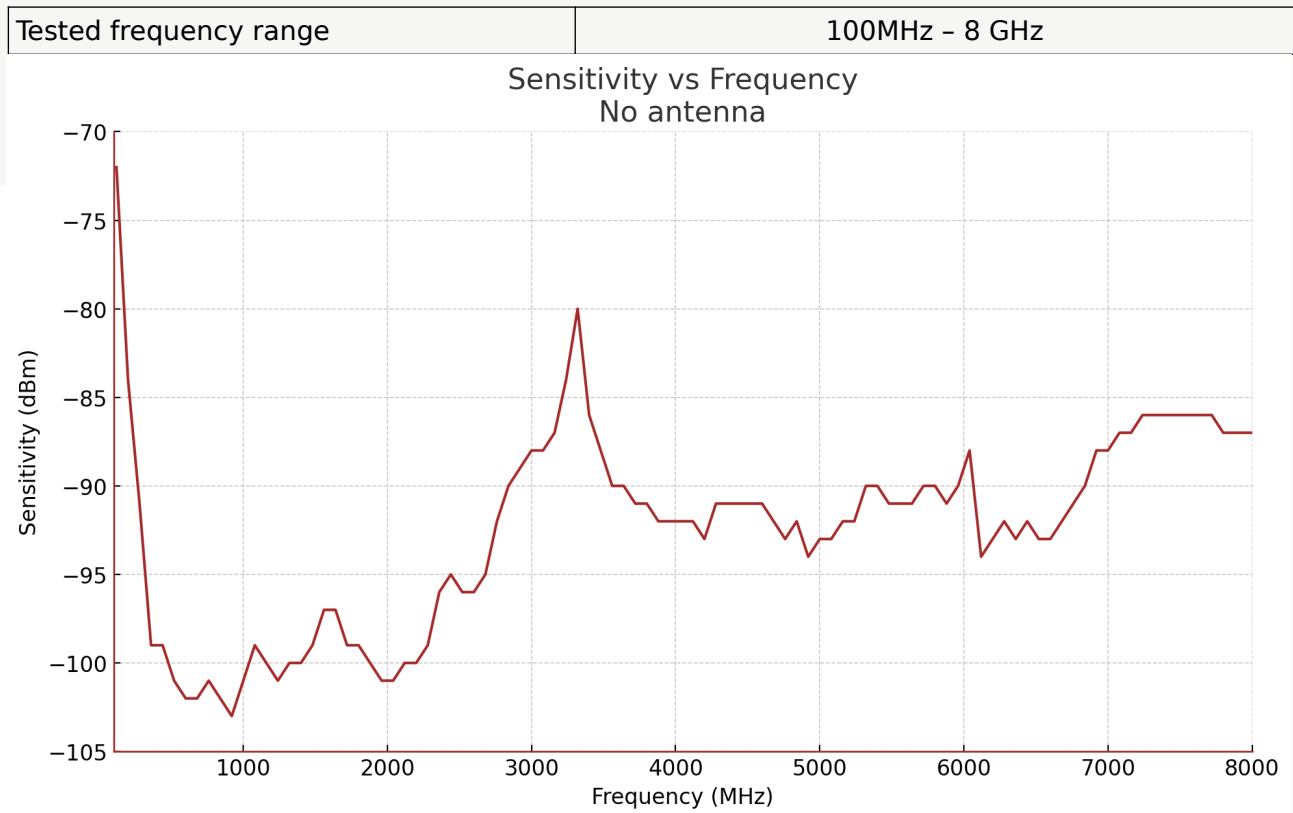
### ATTENUATOR DISCRPTION

Attenuator values are configurable:  
 0-18 Internal (0, 6, 12, 18)  
 0-18 Antenna port (0, 6, 12, 18)  
 Attenuator values should be adjusted according to the antenna type in use to prevent front-end saturation or loss of sensitivity under strong signal conditions.

## Detection sensitivity at antenna port.

| Parameter              | Value      |
|------------------------|------------|
| Signal used            | Analog FPV |
| Attenuator value (dBm) | 0          |
| Antenna gain (dBm)     | 0          |

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\* Hardware supports operation up to 8 GHz

## Signal library



### SIGNAL LIBRARY

The system is capable of detecting any signal within its operating frequency range of **400 MHz to 6 GHz** (extendable to **100 MHz to 8 GHz** with an alternative antenna and software configuration).

To add a signal to the AI model library, a recording must be provided to Rantelon—preferably one captured directly using the device, or alternatively, an IQ sample. The submitted signal will be processed and integrated into the detection model.

## Library

| Protocol                         | Model/Version |  | Protocol              | Model/Version                  |
|----------------------------------|---------------|--|-----------------------|--------------------------------|
| Autel Skylink                    | All (V0-V4)   |  | Parrot                | All WiFi                       |
| DJI Ocusync +<br>DJI Lightbridge | All (V1-V4)   |  | Mobile<br>controllers | 360-L-Flight<br>software, 360- |

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|                         |     |  |                  |                                     |
|-------------------------|-----|--|------------------|-------------------------------------|
|                         |     |  |                  | MFlight software, XBM-FPV software, |
| Analog Video            | All |  | Snaptain         | All                                 |
| Yuneec                  | All |  | Skydio           | All                                 |
| Hubsan                  | All |  | Skydroid         | All                                 |
| Graupner                | All |  | Holy Stone       | HS700E                              |
| Futaba FASST            | All |  | PowerEye         | All                                 |
| Spektrum                | All |  | 3DRobotics/Deerc | All                                 |
| Turnigy                 | All |  | Potensic         | All                                 |
| Walksnail               | All |  | HDZero           | All                                 |
| CRSF Modules (ELRS/TBS) | All |  | Propel/XBM       | All                                 |