Tracer 5

UAI/Detector



Overview

Tracer S utilizes radio frequency spectrum detection technology to provide users with real-time situational awareness without the need for manual intervention or complex operations. The device performs real-time detection by scanning the radio frequency spectrum and analyzing drone data transmission protocols, all while remaining passive and not emitting any signals. It covers mainstream commercial drones such as DJI, Autel, homemade FPV drones, and large multi-rotor UAVs. Through automatic detection, it effectively identifies threats and notifies users with "audio-visual-vibrational" alarms, ensuring user safety.

Key Features

Wideband Coverage

0.6-6 GHz full-spectrum coverage, with support for software upgrades to expand the drone model database, ensuring the system adapts to evolving threat environments.

Outstanding Detection Performance

Detection range ≥ 3 km, with high-precision directional capability (directional accuracy $\leq 15^{\circ}$), enabling threat awareness from multiple directions and guiding users for informed evasion and countermeasure actions.

FPV Video Acquisition

The device can detect UAV video transmissions at 1.2 GHz, 3.3 GHz, 4.9 GHz, and 5.8 GHz, and provides the capability to view real-time FPV video feeds.

Real-time Radio Frequency (RF) Surveillance

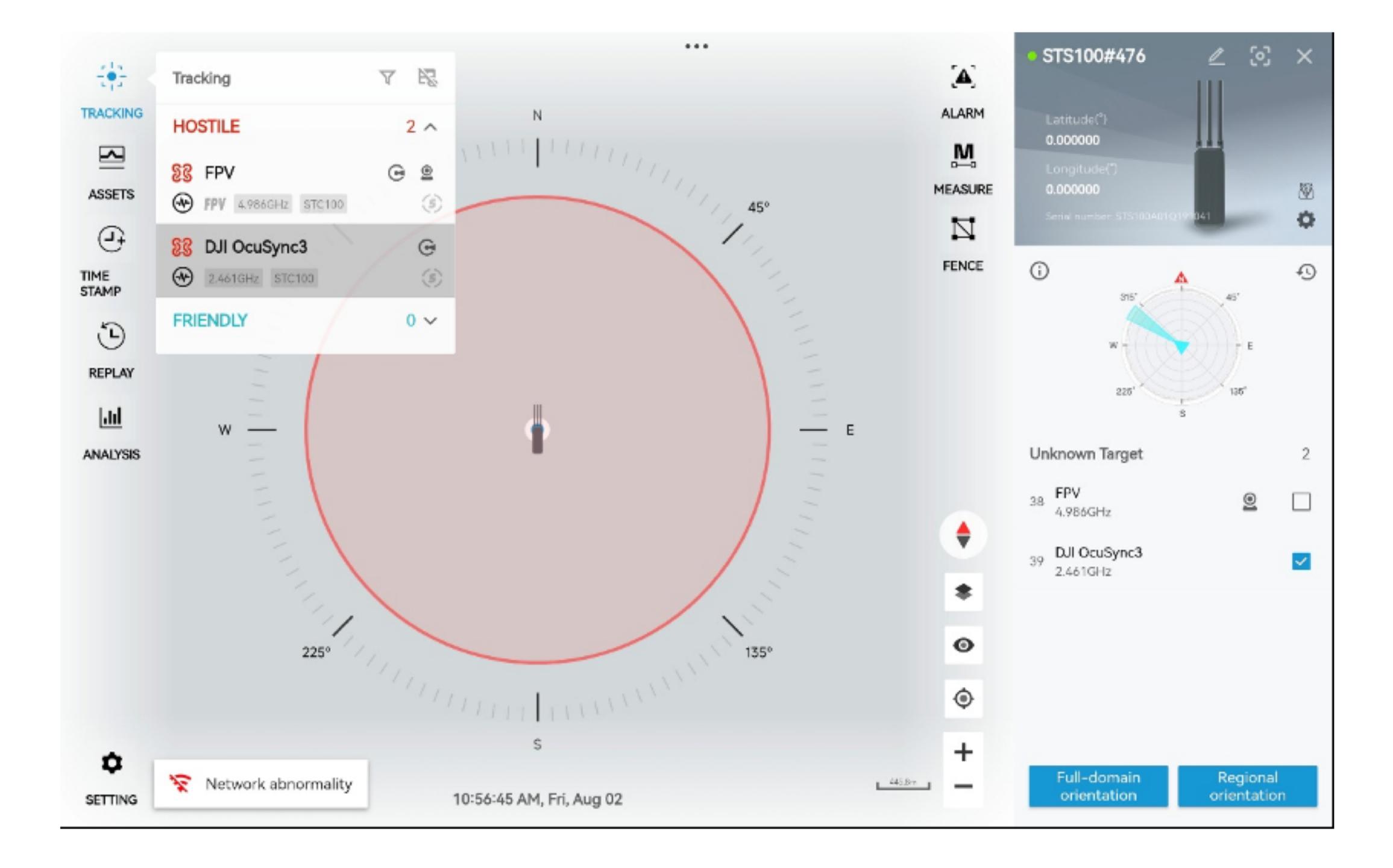
The device supports full-band RF signal monitoring from 0.6 to 6GHz, assisting users indetecting and recording sudden a nomalies in radio frequency signals.



Description

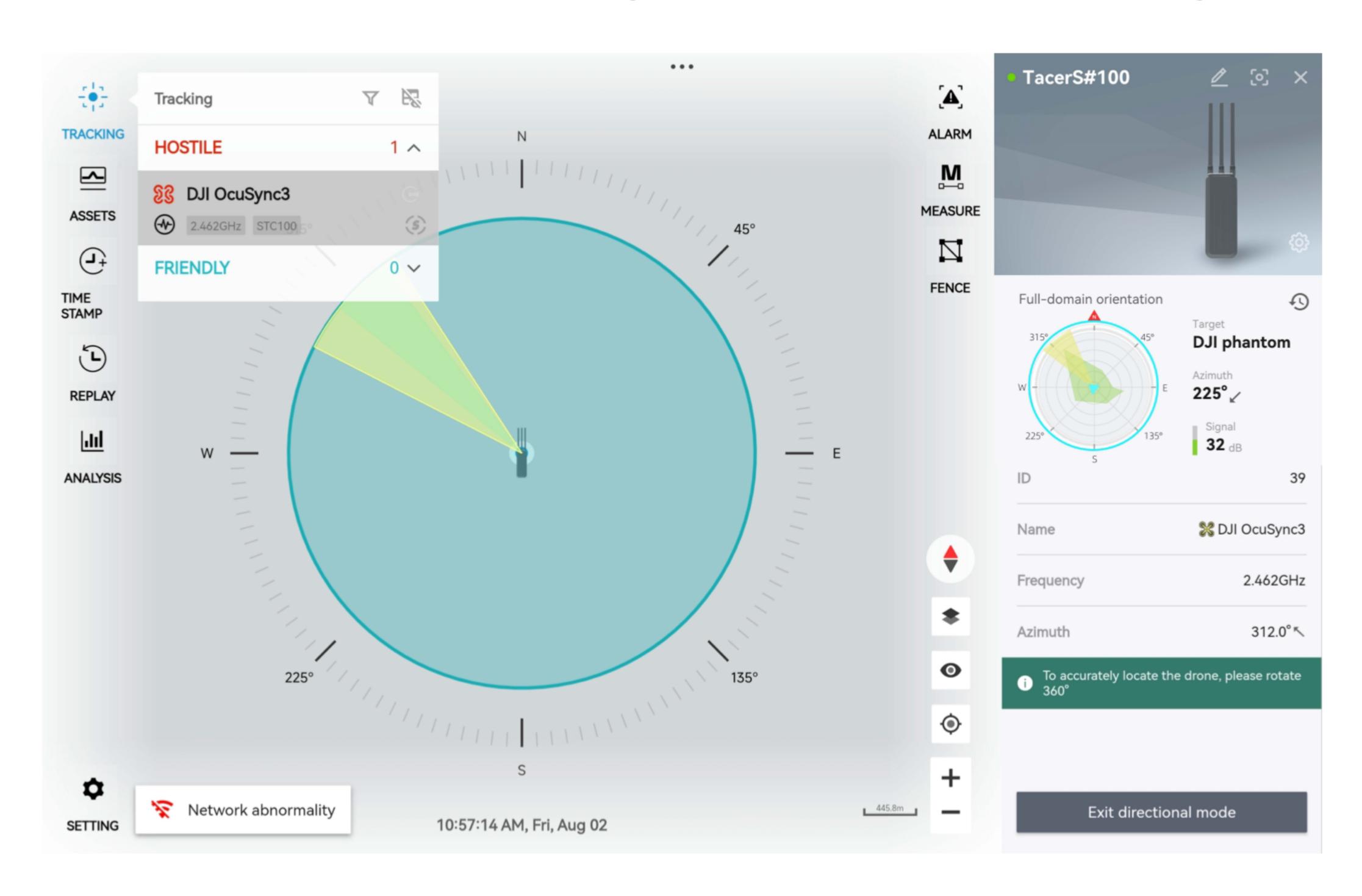
Detection and Warning

The device can simultaneously detect ≥ 10 drones, with users able to view the list of detected drones and their operating frequencies.



Directional Detection

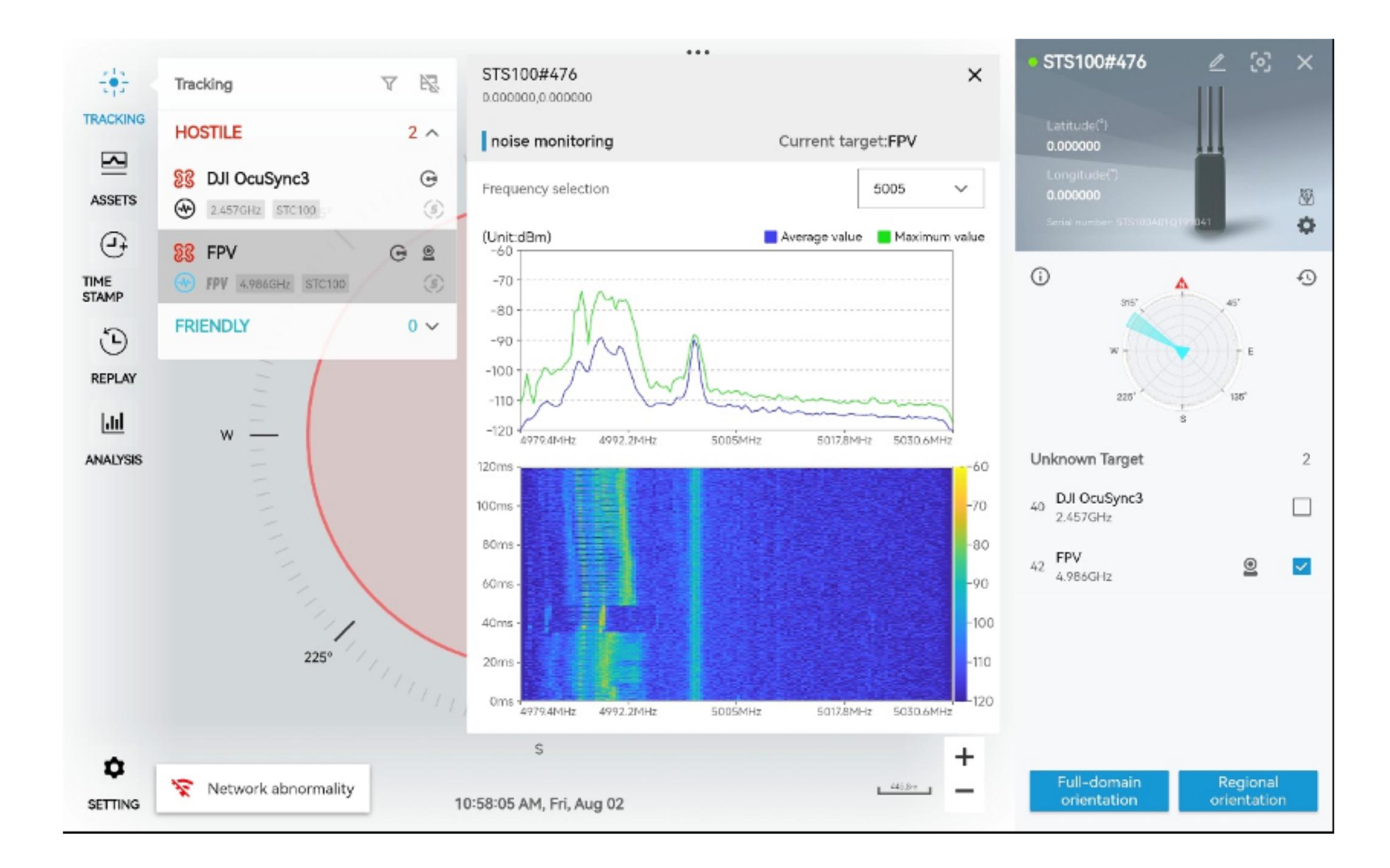
Users can perform directional detection of target drones, viewing the signal strength distribution of the drone across different directions and obtaining the relative direction of the target drone.



Description

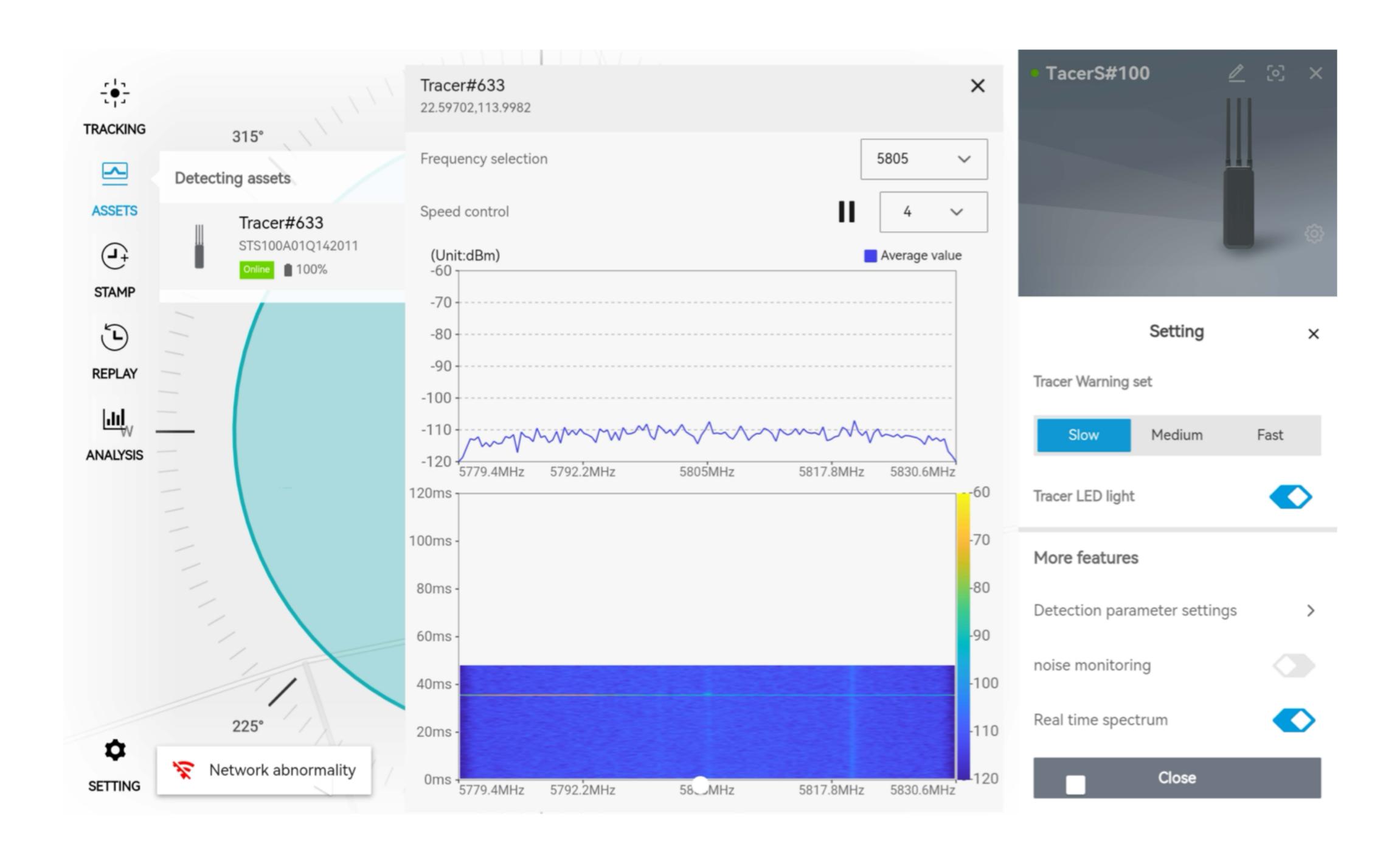
Target UAV RF Signal Tracking

Users can perform real-time monitoring of the target drone's RF signal variations, and view information such as the drone's video feed, current signal strength, and h istorical signal strength.



RF Spectrum Surveillance

Users can utilize the device to perform real-time RF signal monitoring on targeted frequency bands, detecting and recording any sudden anomalies within those bands.

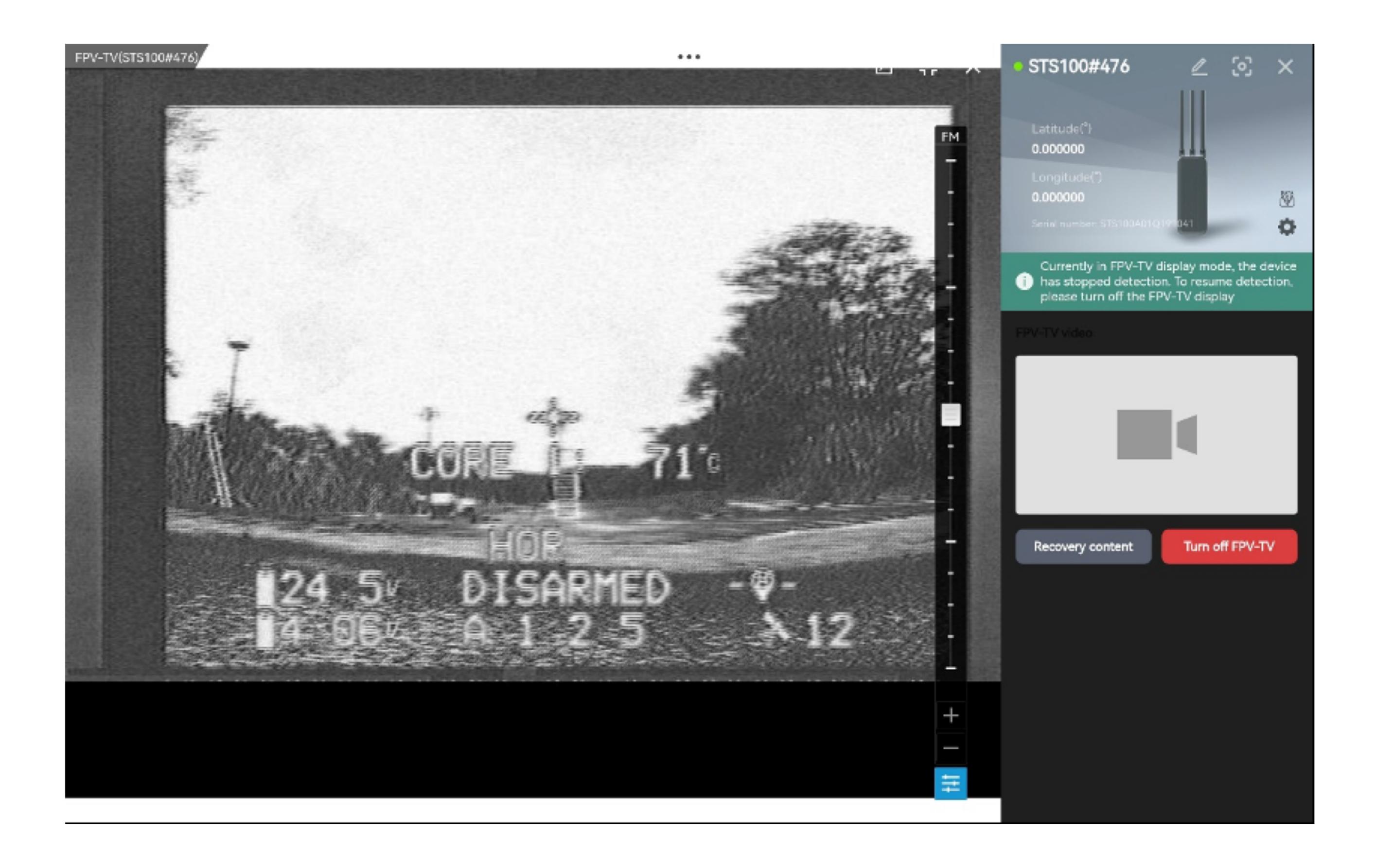


Description

FPV Video Feed Capture

The device supports the acquisition of analog video signals at 1.2 GHz, 3.3 GHz, 4.9 GHz, and 5.8 GHz, and allows for future software updates to receive analog video signals at additional frequencies. Users can select specific FPV channels to view their video feeds, providing multidimensional information.





Specification

HARDWARE

Body with Antennas (mm): 421 x 125 x 75

Weight (g): 1,550 (battery included)

Color: Starry Gray

User Feedback: Haptic /Audible /Visual Flash

SPECTRUM DETECTION

Detection Models:

●Commercial Drones: DJI, Autel Robotics, Parrot, Holy Stone, SJRC,

etc.

●FPV Image Transmission: TBS, rushfpv, PandaRC, matekeey, rxc,

SpeedyBee, iFlight, etc.

●FPV Fly Control: TBS, ELRS, Foxeer, etc.

Detection Range (km): 3 (Omni)

Frequency Band: 800MHz~6GHz (Key detection frequency bands:

800 ~ 900MHz, 1.2GHz, 2.4GHz, 5.2GHz, 5.8GHz)

Trackable Qty: ≥10

Detection Time (s): <3

DIRECTIONAL ANTENNA

Frequency Band: 2.4GHz /5.2GHz /5.8GHz

Angular Accuracy: ≤ 15°

MODEL OF VIDEOACQUISITION

rushfpv, matekeey, rxc, TBS, SpeedyBee, PandaRC, iFlight, etc.

OPERATING ENVIRONMENT

IP Rating: IP65

Operation Temperature (°C): -20 ~ +55

BATTERY

Standard Voltage (V): 11.07 Capacitance (Wh): 103.95

Weight (g): 488

Dimensions (mm): 38 x 82 x 102

Battery Life (hr): 5 (battery replacement within 10s)

