SENESYS XDR

Anti UAV Systems –Tracking & Jamming.
Privacy. Security. Peace.

THREATS OF UAVS*

- Shooting private videos
- Publishing the video on the Internet

- Injuring people
- Damaging property

- Transportation of illicit substances
- Transportation of hazardous goods

Active radio jamming

* Unmanned Aerial Vehicles (drones)

GLOBAL MARKET OF SMALL UAVS

- The market of UAVs is growing rapidly
- Small UAVs are the most widespread and they are becoming dangerous
- Measures to avert threats related to using small UAVs are required

150 000
Small UAVs to be registered, according to the Federal Air Transport Agency

90 %
of UAVs are from DJI company

3 000
Incidents with UAVs (according to mass media)

SXDR – FOREWARNED IS FOREARMED

SXDR FAMILY

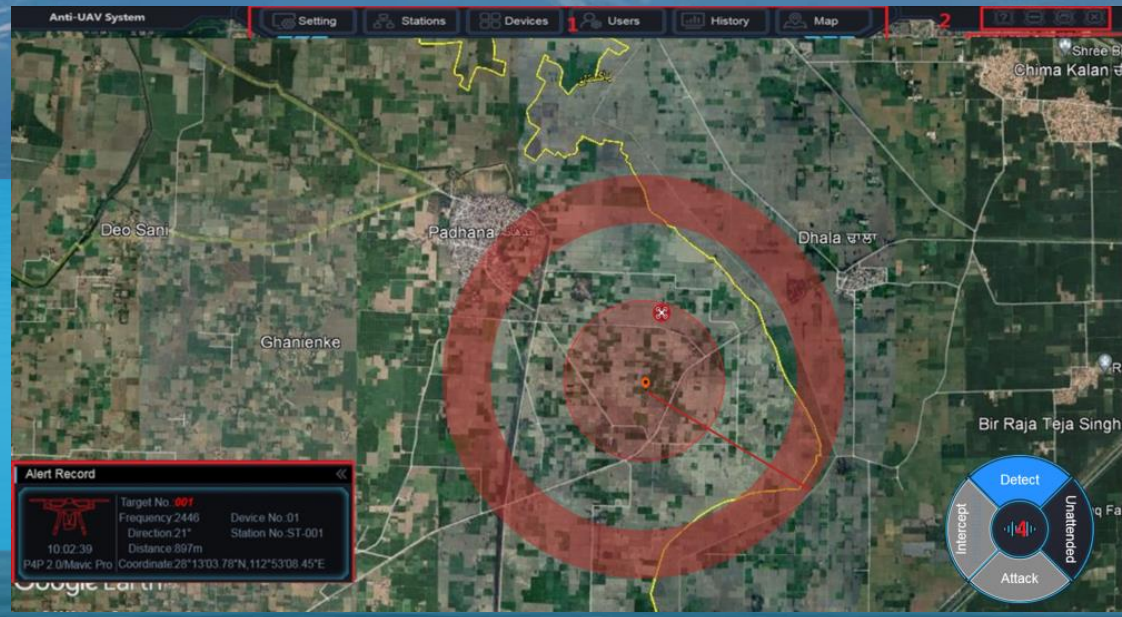
RF SCANNER

RADAR SCANNER

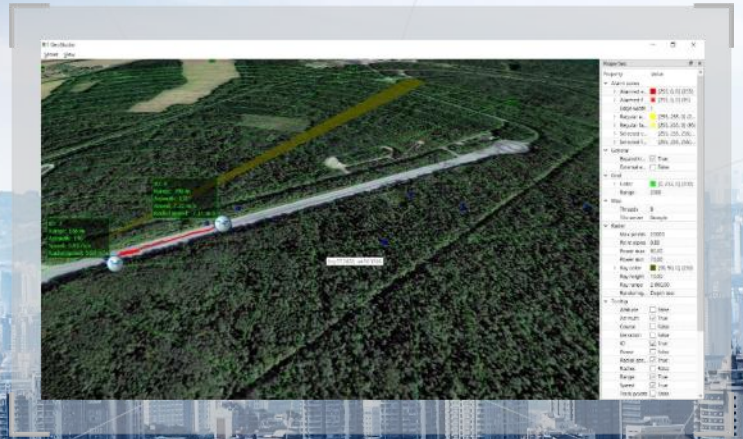
SPOOFER/HACKER

360° JAMMER

CNCC



KEY FEATURES



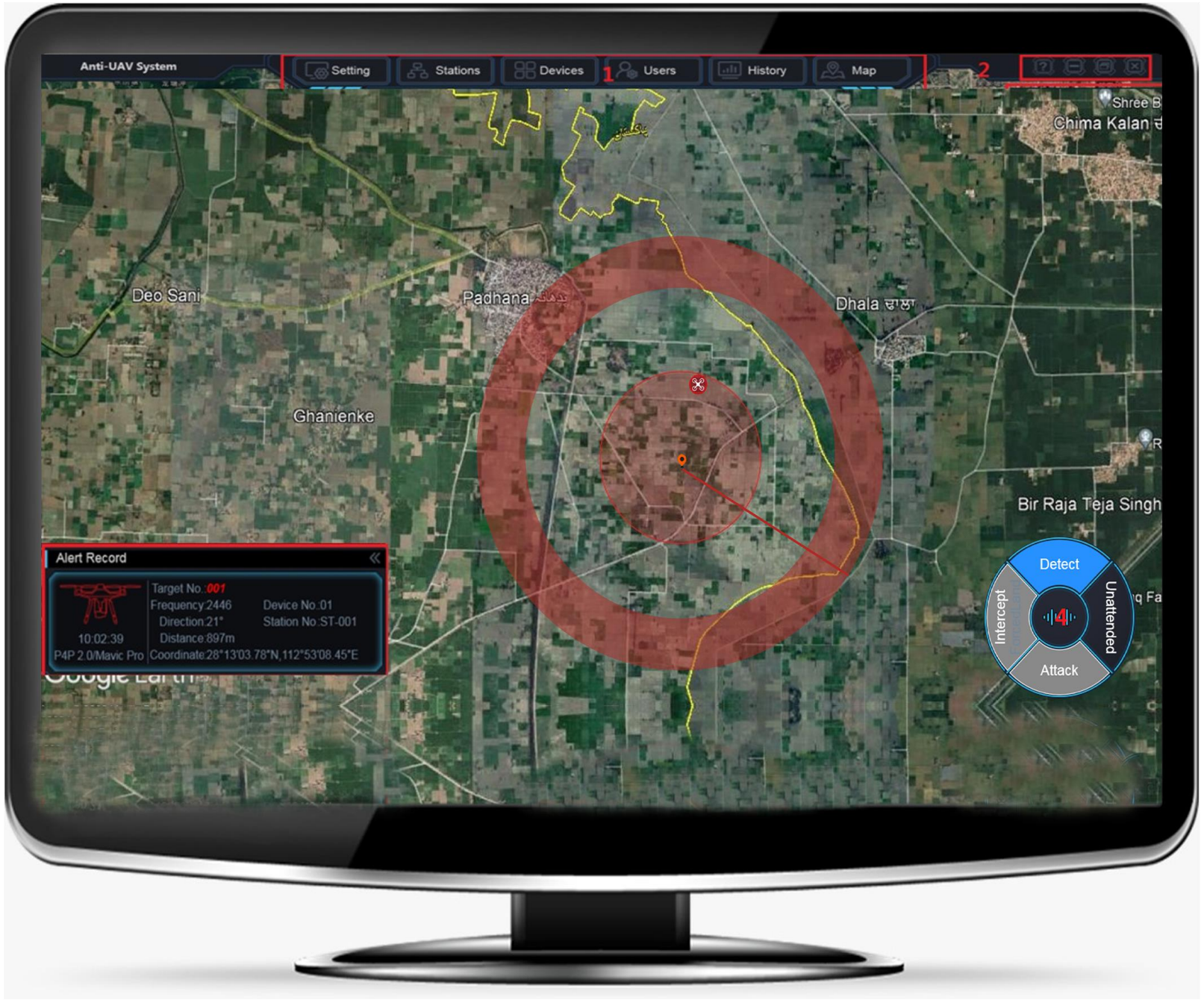
Small dimensions and weight

Low energy consumption

Long range

Operation in various conditions

Detection in the radio-silence mode



SXDR – the operator's view

The operator receives enough information to make a decision:

- pictograms of detected drones on the site map
- tracks of the drones
- range, speed, azimuth and altitude of the detected drones

The security service receives the information about the approaching drones required for further counter action in the real-time mode OR enable Auto Jamming for 24x7 unmanned operation.

SXDR – guarding individual and corporate property

Individual property

Transport infrastructure sites

Fuel and energy sites

Production sites and warehouses

Integrators of security systems

SXDR SYSTEM FUNCTION

- RF Scanner or RADAR searches & detects the moving target in low altitude (100~1000m) and super low altitude (under 100) in all-directions and in all-weather conditions. It can detect the UAV target and generates early warning by analyzing and recognizing the UAV control signals and data link return signals.

Target Detection

Situation Display

- The Command Center receives the Target Info from the Detection end and Displays the Real Time Status of the Coverage Area. An Audio Warning Alarm is generated upon Intrusion Detection.
- If a Long Range Camera is being Integrated in System, it will give the Visuals of Drone on a Screen in Control Room
- It also shows Target Orientation and Location on an offline E-map.

- Upon Intrusion Detection, the Command System sends Command Signal to Jammer to take Countermeasure via Network Communication Cable.
- The action can be enabled for Manual Control or Automatic Control.

Management & Command

Countermeasure

- The Jammer Transmits the Jamming Signal cutting off the UAV's Controlling Signals and Data link Return Signals. In a result UAV Falls freely on the Ground.
- If the System is Integrated with Hacking Module, the Operator can hack the Drone and can land it safely on any desired location.

SXDR COMPONENT DETAILS

SXDR-F5000 SCANNER

Specifications:

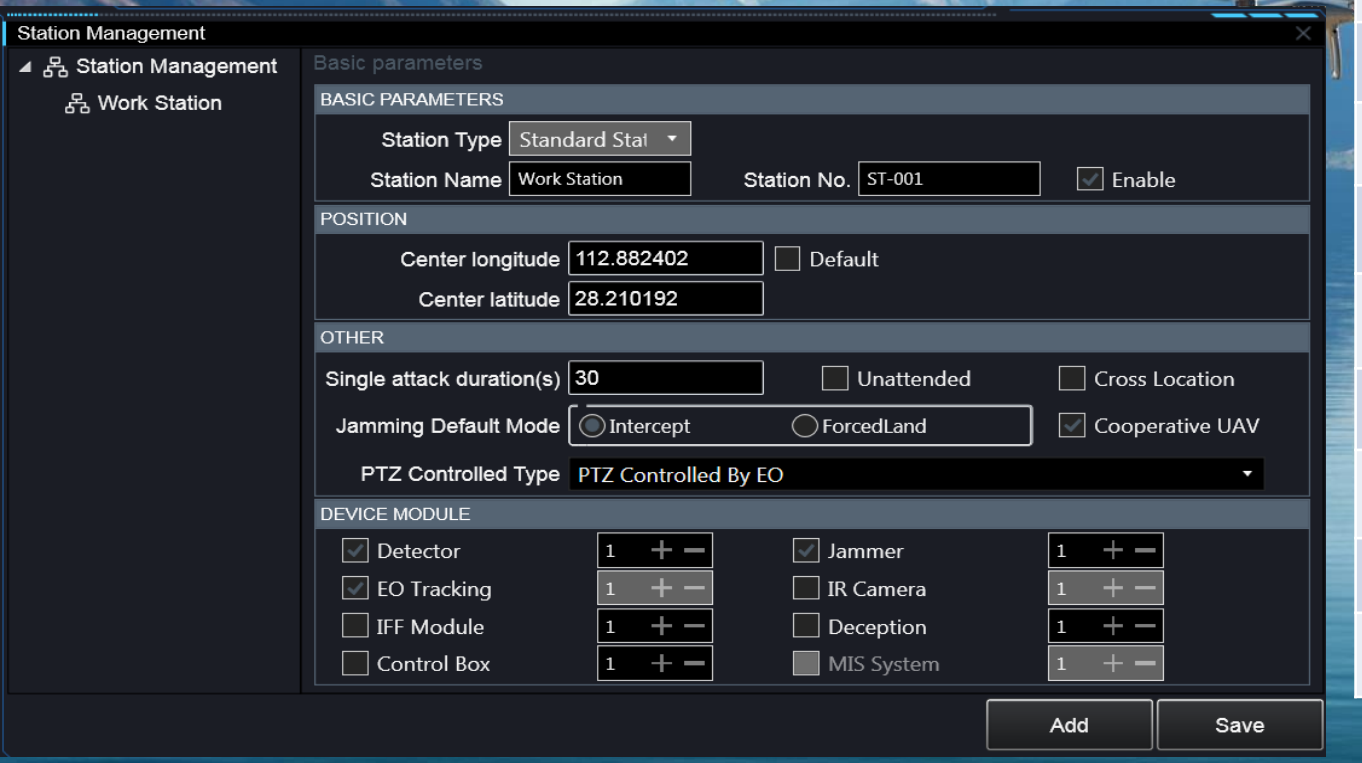
Detection Range	3Kms/5Kms
Detection Frequency Range	70Mhz to 6Ghz
Detection Signal	UAV Digital Transmission Signal, UAV Remote Control Signal(Return Link Signal)
Detection Direction	360 Degrees
Detection Accuracy	≤3° (RMS)
Detection Time	≤3 Sec
Communication Port	LAN
Positioning	GPS Enabled; BDS B1/B2 + GPS L1/L2+ GLONASS L1/L2+Galileo E1/ E5B
UAV Library	Auto Matching Updated Library 2022 for Identification Matching
Power Supply	AC 110-220V
Power Consumption	≤20Watts
Device Dimension	D 455 x H 265mm
Installation Method	Fixed or Portable Tripod
Weight	<8Kgs
Working Temperature	-40° C to +65° C
Ingress Protection	IP65

SXDR-R5000 RADAR

Specifications:

Detection Range	3Kms/5Kms
Radar Type	Ku Band, Chirp System
Scan Mode	Azimuth Mechanical Scan + Elevation Phase Scan
Detection Range	Radius 5km@UAV RCS=0.01㎡, 10km for human , 20km for vehicle
	Accurancy≤8m; resolution≤20m
Detection FOV	Azimuth 0°~360° elevation ：0~60°
	Accuracy: azimuth≤0.8°， elevation≤0.6°
	resolution: azimuth≤2.5°， elevation≤4°
Simultaneous detection of drones	200 Drones Simultaneously
Measurement	Distance， orientation， pitching angle，
	speed
Tracking mode	TWS/Continuous tracking
Map	Superimposed map and sea chart
Weight	≤20kg
Dimension	580*380*210mm
Power Consumption	≤160w

SXDR-J3000 JAMMER



Specifications:

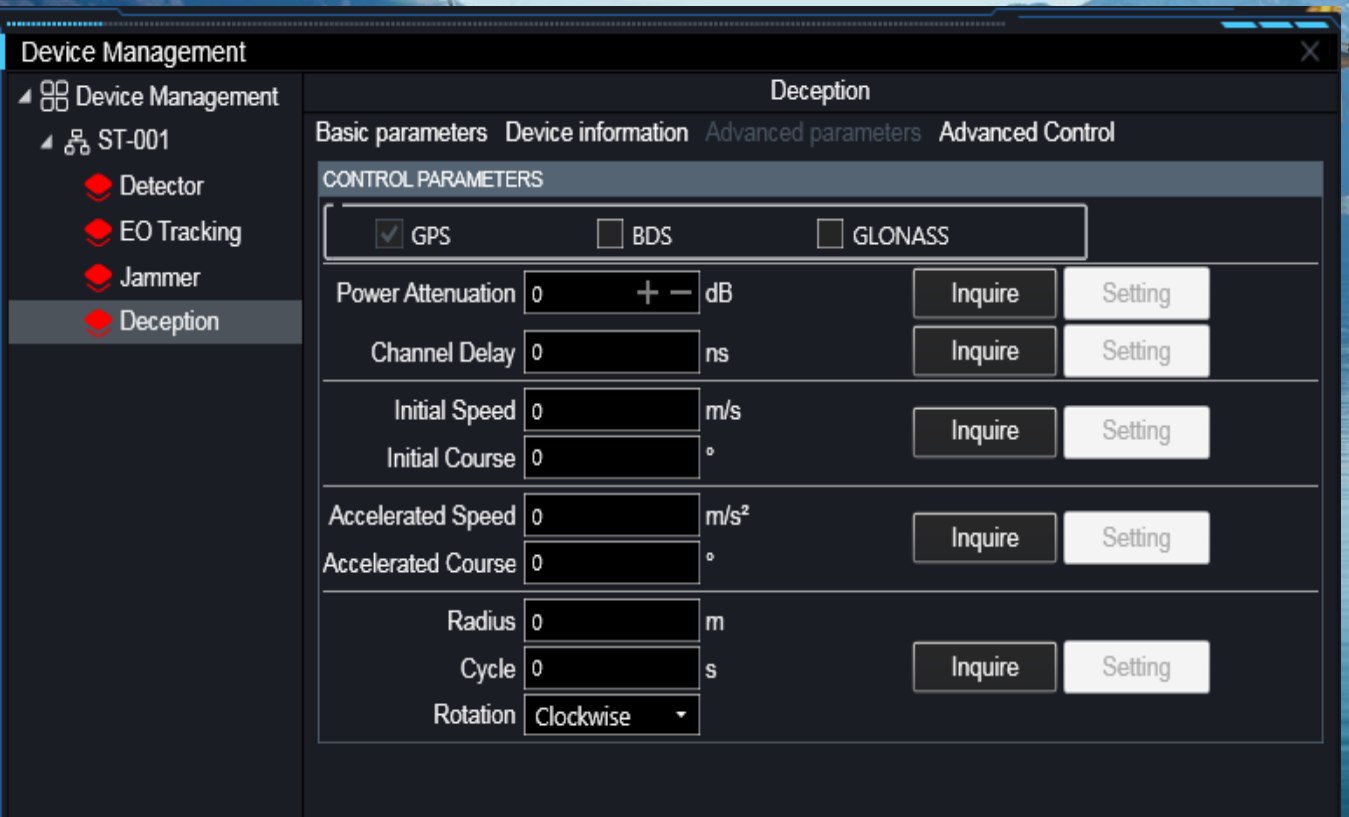
Jamming Range	3Kms
Transmit Power	≤10W/ Frequency Band
Frequency Bands	Navigation: (GPS, BEIDOU, GLONASS) Controller: 400Mhz, 800Mhz/900Mhz/2.4Ghz/5.8Ghz
PTZ Elevation	-15° to 65°
PTZ Azimuth Coverage/Speed	0° to 360° , ≥60°/Sec
Communication Port	LAN
Power Supply	AC 100-240V/50-60Hz
Power Consumption	≤20Watts
Device Dimension	250mm x300mm x550mm including PTZ Stand
Installation Method	Fixed or Portable Tripod
Weight	5Kgs (without PTZ), 18Kgs including PTZ
Working Temperature	-20° C to +60° C
Ingress Protection	IP65

SXDR-J5000 JAMMER

Specifications:

Jamming Range	5Kms
Transmit Power	Each frequency band≤100W
Frequency Bands	Custom output jamming frequency band within 300MHz~6GHz frequency band, support configuration of no less than 20 jamming channels
Supression Ratio	20:01
Power Supply	AC100-240V/50-60Hz
Jamming Angle	360° directional (PTZ implementation)
PTZ Rotation Range	≥60°/s
Dimensions	≤400mm*500mm*700mm
Ingress Protection	IP66

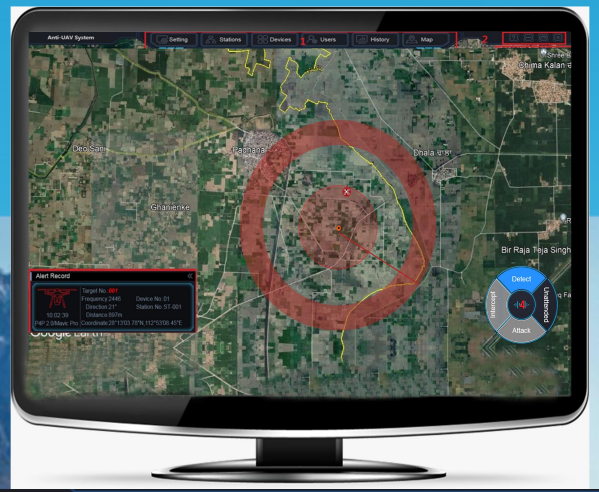
SXDR-H1K SPOOFER

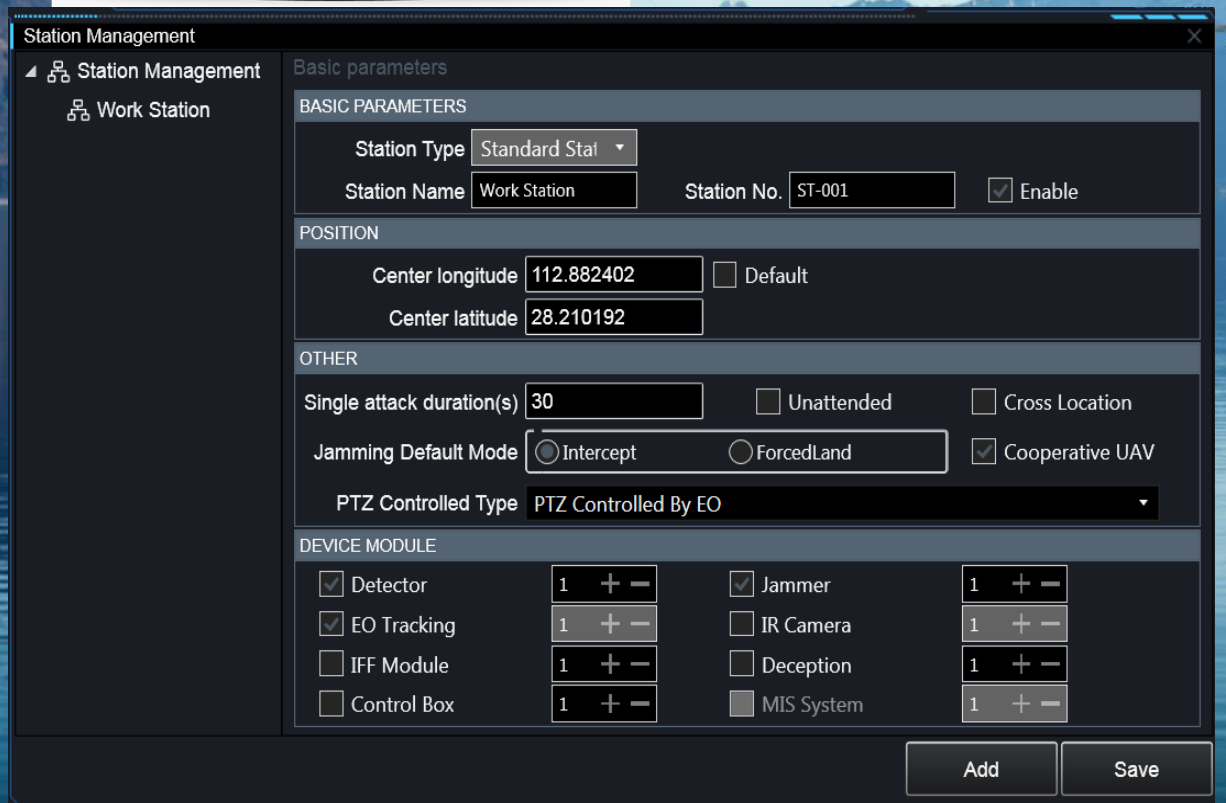


Specifications:

Range	1Kms
Transmit Power	10mW
Frequency Band	Civil drones navigation frequncy band of GPS/BEIDOU/GLONASS/ Galileo
Power Consumption	≤40W
Protection Range	360°
Warm-up Time	≤5 minutes
Communication Port	RJ45
Power Supply	AC220V/50HZ, DC24V
Weight	≤10kg
Operating Temperature	-40℃~60℃
Ingress Protection	IP65, Ex d IIC

Command & Control Software CNCC





Features:

Device Management And Settings
Protection Area Real Time Situation Display
Alarm Info Display on E-Mao
Threat Alarm
Threat Level Classification
Camera Tracking & Visuals(Optional)
Target Orientation & Distance Display
Automatic Attack/ Manual Attack Mode Switching
Event Log
Multiple Systems Integration
The CNCC integrates all device parameter Settings in the system, including detection equipment, photoelectric tracking equipment, jamming equipment, GPS Spoofing equipment, infrared equipment, white-list module, information management center and other parameter settings.

THANKS

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