Synway Protector™ IMSI Catcher

The Synway's Protector™ IMSI Catcher is a portable or fixed unit designed to extract IMSI or IMEI numbers from mobile devices in its operational zone. Capable of capturing different identifiers for each cellular device, including those using Bluetooth and Wi-Fi, the Synway Protector™ IMSI Catcher can detect the presence of all cellular phones in the restricted areas where it is deployed and issue an alert if a target device is identified.

The Synway Protector™ IMSI Catcher can store captured IMSI and IMEI and adopt simple and easy to use analytic software to provide advanced analytics, and can be easily integrated into other intelligence-gathering systems, and works across all cellular makers, and operating systems, as well as 2G, 3G, 4G and 5G technologies, including most mainstream relevant frequency bands in multi-cell configurations. It is available in various configurations to meet a range of tactical requirements.

With add-on advanced location and firewall technologies, the Synway Protector™ IMSI catcher can capture cellular IMEI or IMSI unique identification and precisely identify cell phone location. The device also can work in "selective blocking mode". In this mode, the authorized mobiles phones can access the public mobile networks normally while the unauthorized ones can't.

Synway designs and builds all its systems in-house, and so configurations can be customized to specific customer needs upon request, Synway Protector™ IMSI Catcher comes in various form factors and flexible configurations: 1) highly compact unit that fits into a jacket pocket; 2) ruggedized suitcase or portable backpack unit; 3) vehicle-mounted for flexible deployments; 4) fixed, rack-mounted unit for long-term operations.

This enhanced utility enables relevant **law enforcement agencies, search and rescue, correctional facility, prison, police and counter terrorism, border security, emergency service and telecommunication** to augment their intelligence on potential targets and, if required, take appropriate action.

Core Features

Multi-identifier Capture
Extracts unique identifiers from mobile devices in the operational zone, and detects all cellular phones in restricted deployment areas and triggers alerts when target devices are identified.

Precise Location & Selective Blocking
Use advanced location technologies to accurately pinpoint the location of cellular devices via their IMSI/IMEI, and Support "selective blocking mode".

Data Storage & Advanced Analytics
Stores captured IMSI/IMEI data in a database, and adopts simple, user-friendly powerful analytic software to process and analyze stored data.

Broad Compatibility & Integration
Works across all cellular phone brands, operating systems, and network technologies (2G, 3G, 4G, 5G), covering most mainstream frequency bands in multi-cell configurations.

Diverse Form Factors & Customization
Offers flexible configurations for different tactical needs: Highly compact (pocket-sized); Ruggedized suitcase /backpack (portable); Vehicle-mounted; Fixed rack-mounted, or etc.

Core Benefits

Tactical Flexibility
Diverse form factors (pocket, portable, vehicle-mounted, fixed) adapt to scenarios ranging from covert missions to long-term stationary operations, meeting varied on-site needs.

Efficient Intelligence Support
Real-time alerts for target devices, precise location data, and actionable analytics help law enforcement agencies quickly identify potential targets and make informed decisions.

Targeted & Secure Control
"Selective blocking mode" balances security (blocking unauthorized devices) and normal operation (approving authorized ones), avoiding unnecessary disruption to legitimate communications.

Tailored Adaptability
Customizable configurations (via in-house production) let customers tailor the system to unique mission requirements (e.g., specific frequency bands, deployment environments).

Comprehensive Coverage
Compatibility with 2G-5G, all device brands/OS, and mainstream frequency bands ensures no gaps in detecting devices within the operational zone, even for latest-generation mobile technologies.

Technical Specification

Main Functions	IMSI and IMEI Catcher, Add-on cellular locator and cellular firewall	
Applications	law enforcement agencies, search and rescue, correctional facility, prison, police and counter terrorism, border security patrol, emergency service and telecommunication	
Base station	Simulates GSM/ UMTS/ LTE/5G NR base stations simultaneously. The supported network protocols can be customized.	
Bands	Support 2G, 3G, 4G, 5G, the frequency band include GSM/UMTS/LTE	
	5G	N1:uplink: 1920-1980MHz;downlink:2110-2170MHz N5:uplink: 824-849MHz;downlink:869-894MHz N8:uplink: 880-915MHz;downlink:925-960MHz N28:uplink:703-748MHz;downlink:758-803MHz N41:2496-2690MHz N77/N8:3300-3600MHz N79: 4400-5000MHzz
	4G	B1:uplink: 1920-1980MHz;downlink:2110-2170MHz B3:uplink: 1710-1785MHz;downlink:1805-1880MHz B5:uplink:824-849MHz;downlink:869-894MHz B8:uplink:880-915MHz;downlink:925-960MHz B34:2010-2025MHz B39:1880-1920MHz B40:2300-2390MHz B41(38):2496-2690MHz
	3G	WCDMA:B1: uplink: 1920-1980MHz; downlink:2110-2170MHz CDMA:B5: uplink: 824-849MHz; downlink:869-894MHz
	2G	GSM900:uplink:890-915MHz; downlink:935-960MHz DCS1800:uplink:1710-1785MHz; downlink:1805-1880MHz
	Notes: The number of supported bands will continue to be updated and can be customized according to clients' need.	
Transmit Power	≤ 47 dBm (50 Watt), stepless adjustment	
Sensitivity	≤ -110 dBm	

Signal Coverage Radius	50-1000m (Typical / Ideal Environment): With distributed deployment, the coverage area can be expanded via indoor distributed antennas
Antenna Interface	N-Type
Software Features	Data Export Format: Excel Multi-User Permissions: Not Supported Remote Management: Web Whitelist/Blacklist Capacity: Unlimited Capture Rate: 50 Entries/Sec Storage Capacity: 1 Million Records Control Platform: PC Terminal
Electrical Parameters	Input Voltage: AC 110-220V, DC Optional Power Consumption: based on function, usually less than 1,000Watt Battery Capacity: Optional or based on necessity Battery Life: based on necessity
Physical Parameters	Housing Material: ADC12 Die-Cast Part (Die-Cast Aluminum Alloy) Protection Class: IP67 Dimensions (Length × Width × Height, mm): The dimensions are related to the number of supported frequency points and coverage range; Weight: custom-made by needs
Environmental	Operating Temperature Range: -40 – 55 °C Storage Temperature Range: -40 – 55 °C Humidity: 5% – 98% RH Shock Resistance Class: IEC
Accessories List	Signal Shielding Main Unit Main Unit Power Cable Main Unit Ethernet Cable Signal Shielding Front-End Beidou Antennas Ceiling-Mounted Antenna Installation Accessories (including feeder cables and hoop accessories)
Scan and set-up	Automatically provides users with the ideal parameter for the most effective attraction of mobile phone subscribers.
Detection	Alarm can be triggered upon the presence of a specific mobile phone.
IDs	Capture and record cellular identifiers (IMSI, IMEI), which are stored in database and analyzed.
White list	Allows a predefined list of devices to work while denying service to all others.
Blacklist	Allows operation in a targeted mode where all phones are released but a predefined list of targets is held / denied.
Downgrade	Ability to downgrade target mobile phone from LTE or UMTS to GSM.
Warranty	3-Years, lifetime technical support for free