



# NR17 PANORAMIC SPECTRUM ANALYZER



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## PRODUCT INTRODUCTION

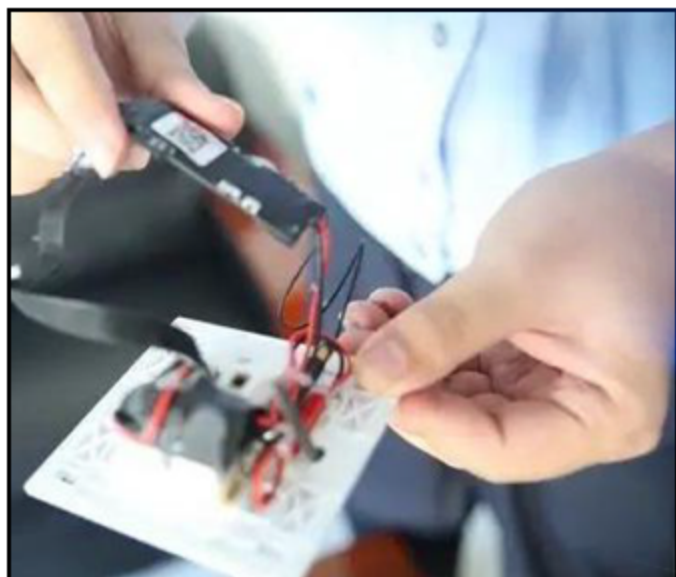
The NR17 series panoramic spectrum analyzer (information confidentiality detection equipment) is a product used to detect various electromagnetic leaks, electromagnetic attacks, and their devices in the 9KHz~12/24GHz frequency band. The product is based on the core technology of electromagnetic signal feature library, integrating practical professional detection and analysis methods such as 4G/WiFi behavior analysis and 5G terminal discovery, to achieve real-time detection, intelligent analysis, accurate identification and classification of spectrum signals, from Pang signals and devices. In the massive signal collection of products, identifying and discovering "threats" meets the requirements of secure and controllable conference security, lightweight and highly integrated design, site security, intelligence protection, privacy protection and other temporary inspection needs.



## ■ APPLICATION SCENARIOS



NR1411



## ■ PRODUCT FEATURES



### SELF DEVELOPED SAFETY AND CONTROLLABILITY

- INDEPENDENTLY DEVELOPED HARDWARE ARCHITECTURE/SOFTWARE PLATFORM/INVOLVING KEY ASPECTS THE CORE ALGORITHMS OF THE TECHNOLOGY ARE ALL INDEPENDENTLY DEVELOPED.
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### FOCUS ON IDENTIFYING THREATS

- WIFI INTELLIGENT ANALYSIS AND INTELLIGENT SNIFFING OF WIFI THEFT AND LEAKAGE DEVICES, OBTAINING IDENTITY INFORMATION, DEVICE INFORMATION, AND ASSOCIATED RELATIONSHIPS TO ASSIST IN IDENTIFYING SUSPICIOUS DEVICES;
- 4G TERMINAL IDENTIFICATION ACQUISITION SUPPORTS OBTAINING UNIQUE REGIONAL IDENTIFIERS FOR 4G SINGLE TERMINALS, WITH INDEPENDENT ANALYSIS CAPABILITIES FOR EACH TERMINAL;
- 5G TERMINAL DISCOVERY ENABLES TRANSMISSION TO SURROUNDING 5G TERMINALS CURRENTLY;
- WIFI/4G TERMINAL BEHAVIOR ANALYSIS IS A PROTOCOL LEVEL BEHAVIOR ANALYSIS ALGORITHM FOR 4G AND WIFI, WHICH ANALYZES BEHAVIORS SUCH AS VIDEO, AUDIO, AND CALLS, AND IDENTIFIES AND DISCOVERS THREATS FROM MASSIVE SIGNALS “
- PSEUDO BASE STATION IDENTIFICATION AND RECOGNITION OF PSEUDO BASES AROUND MONITORING POINTS  
STATION AND ITS INFORMATION: FREQUENCY BAND, PCI, ETC.



## INNOVATIVE INTELLIGENT INSPECTION

- MULTIDIMENSIONAL SIGNAL DISPLAY FREQUENCY, BANDWIDTH, MODULATION METHOD, ETC ACCURATE EXTRACTION AND CLEAR PRESENTATION OF MULTIDIMENSIONAL SIGNAL FEATURES,
- ELECTROMAGNETIC SIGNAL FEATURE LIBRARY BASED ON CONTINUOUS LEARNING OF ELECTROMAGNETIC CHARACTERISTICS COLLECTING INVENTORY, AUTOMATICALLY DETECTING AND ALERTING SUSPICIOUS THEFT DEVICES SUPPORT COOPERATIVE COMMUNICATION WITH OPERATORS, RADIO AND TELEVISION, ETC IDENTIFICATION AND CLASSIFICATION
- INFORMATION DISPLAY ON THE SAME SCREEN SUPPORTS SPECTRUM AND WATERFALL ANALYSIS INNOVATIVE INTEGRATION WITH SIGNAL INTELLIGENT ANALYSIS,
- TERMINAL RECOGNITION EFFECTIVELY IDENTIFIES MULTIPLE IN THE SAME FREQUENCY NETWORK ABNORMAL TERMINAL



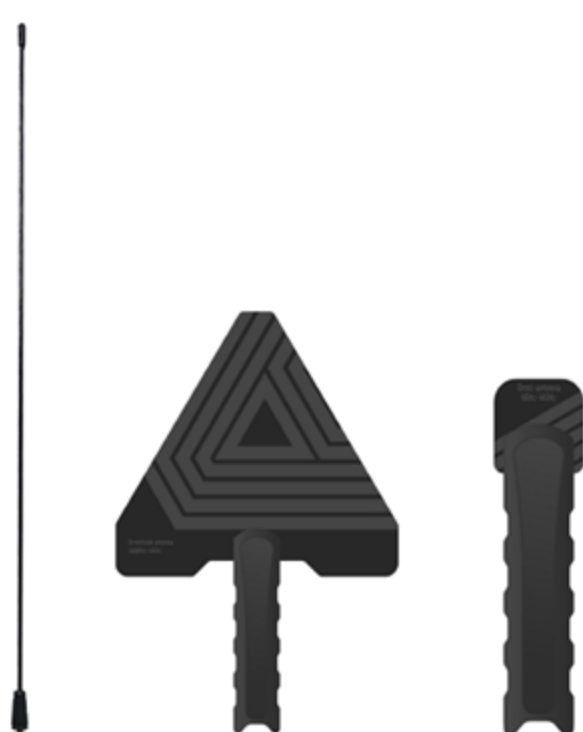
## FLEXIBLE ALGORITHM TOOLS

- MULTIDIMENSIONAL DATA ANALYSIS IN TIME DOMAIN, FREQUENCY DOMAIN, BACKGROUND SIGNAL, ETC MULTIDIMENSIONAL DATA ANALYSIS;
- INTELLIGENT ANALYSIS BACKGROUND ANALYSIS, COLLISION ANALYSIS, COMPANION ANALYSIS VARIOUS DATA ANALYSIS STRATEGIES SUCH AS ANALYSIS;
- SIMULATE AUDIO AND VIDEO TO RESTORE FM AND AM AUDIO AND VIDEO CONTENT ORIGINAL;
- ELECTROMAGNETIC LEAKAGE RESTORATION HDMI ELECTROMAGNETIC LEAKAGE SIGNAL RESTORATION
- DEBUGGING AND IDENTIFYING AM, FM, ASK, FSK, ETC. 10+ MODULATION MODE RECOGNITION;
- THE SDR PLATFORM CAN BE EXTENDED TO SUPPORT WIRELESS KEYBOARDS, RFID DEEP ANALYSIS AND RECOGNITION OF SIGNALS SUCH AS WALKIE TALKIES AND WIRELESS MICROPHONES.

## ■ PRODUCT COMPOSITION



**NR17 SERIES**



**NR1711 SERIES**  
- MATCHING ANTENNA

## ■ PRODUCT PARAMETERS

KEY INDICATORS	NR1712	NR1724
BAND LIMIT	9KHz~12GHz	9KHz~24GHz
CABLE TESTER	220V power line transmission signal: 10KHz~150MHZ 75Ω coaxial cable transmission signal: 5MHZ~2GHZ (optional SAK/MPPB implementation)	
SIGNAL ACQUISITION BANDWIDTH	200MHz	
REAL TIME SCANNING SPEED	80GHz/s	
RECEIVING SENSITIVITY	≤-110dBm	
MINIMUM RESOLUTION	1Hz, 1Hz~30KHz, Support multiple adjustable functions	
MODULATION MODE RECOGNITION	AM, FM, CW, ASK, BPSK, QPSK, OQPSK, 8PSK, 2FSK, MSK, 4FSK, 16QAM, OFDM	
AUDIO AND VIDEO ANALOG SIGNAL RESTORATION	audio : AM, FM video : AM, FM (PAL, NTSC, SECAM)	
CONTROL METHOD	11.6 Inch high-definition touch screen	
INTERNAL STORAGE	512GB, Maximum support up to 2TB	
EQUIPMENT INTERFACE	USB 3.0 interface, 1GE network port	
EQUIPMENT SIZE	335mm * 260mm * 83mm (Length * Width * Height)	
EQUIPMENT WEIGHT	6.1kg	
EQUIPMENT POWER CONSUMPTION	70W	WORKING TEMPERATURE -10°C~45°C
SOFTWARE FUNCTION	Spectrum acquisition, time-domain scanning, signal analysis, background comparison, modulation recognition, modulation demodulation, digital TV analysis, AM/FM audio and video restoration, WiFi behavior analysis, 4G behavior analysis, 5G terminal discovery, wireless keyboard/mouse/microphone recognition, RFID signal recognition, DSSS signal recognition, HDMI GA video restoration, walkie talkie analysis, and pseudo base station recognition.	