NLJDJS830

Infrared Imaging Non-linear Junction Detector

NLJDJS830 is an infrared imaging non-linear junction detector that innovated in combining non-linear junction detector with infrared imaging, which can detect any electronic equipment hidden in walls, floors, ceilings, lamps, furniture or containers. No matter whether these electronic devices are transmitting signals or starting up, they can alarm through display, vibration and sound prompt. At the same time, the infrared imaging module can detect synchronously, and the suspicious electronic equipment detected can be imaged and displayed, which can greatly reduce the false alarm in the detection process and improve the work efficiency of detector.

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Technical Principle

Infrared imaging non-linear junction detector boasts both the function of infrared imaging and non-linear detecting. The transmitting end of the detector sends the fundamental wave of the S-band to the area target object, while the receiving end captures the second and third harmonics generated from the target object, and uses artificial intelligence algorithms to analyze the harmonic laws to judge whether there are suspicious electronic products or metal corrosion nodes in the detecting area.At the same time, the infrared imaging module can display the real thermal image contour of the thermal objects in detected areas to make it easier for operating man to judge whether the suspicious electronic devices is taking place, and to improve the efficiency and accuracy of safety inspection.

Application Scenarios

It can be widely used in government, public security, prison, justice, commercial security and personal privacy protection, etc.:

◎ Enterprise and commercial secret protection: Detect unauthorized electronic devices hidden in important conference rooms or confidential offices of the company, such as eavesdroppers, mobile phones and devices containing SIM cards, etc..

◎ Public security and SWAT explosive disposal: Detect electronic detonation devices and remote controls in dangerous areas.

◎ Personal privacy protection: Detect equipment for secretly photographing and recording hidden in houses, hotels and other places, such as recording pens, cameras, etc..

Product Highlights

◎IPR: fully independent intellectual property rights not limited by technical protection, can quickly customize features and optimize algorithms, technical security under greatly protected.

◎High efficiency: the infrared imaging module can quickly and directly spot the product shape and help the operating man to identify the type of the electronic devices to reduce the miss and false alarm alert.

◎High accuracy: the built-in second and third harmonic detection function can quickly and effectively identify the equipment containing semiconductor devices.

◎High sensitivity: it can quickly identify semiconductor products hidden in walls or furniture.

◎Low false positive rate: the built-in nondestructive detection algorithm greatly improves the detection ability, and the false positive rate is very low.

◎Harmless to people: the characteristics of the equipment meet HJ / T10.2 radiation environmental protection guidelines and management requirements, which are absolutely safe and harmless to human body.

◎Easy to operate: humanized operation interface, simple and intuitive; Few keys for manual operation.

Product Specification

Type	Parameter	Technical Index
non-linear detector module	Product working frequency band	2.400GHz
	Working voltage	7.4V
	frequency range	2.404GHz - 2.472GHz
	Receiving 2nd~3rd harmonic range	4.808GHz-4.944GHz,
		7.212GHz-7.416GHz
	Pulse mode transmit power (maximum)	4W（ERIP）
	Receiving sensitivity	≤-140dBm
	Battery working time	4H/Piece
thermal infrared imaging module	Infrared imaging lattice	160x120,continuous scanning
	Pixel	12μm
	Thermal imaging sensitivity	<50mK(0.050℃)
	Fov-level	57°
	Fov-diagonal	71°
	Infrared lens type	f/1.1
	Battery type	Replaceable lithium battery
entire parameters	Interactive interface	LED displays received harmonic signal intensity
		Audio prompts are supported and headphones can be connected.
		Supporting vibration tips
		Displays the infrared image of the detected objects
	Detection distance	>6M， C-class product complying with GA1236-2015 standard
	Detect penetrability	It can penetrate 370mm brick wall and meet the grade C product specified in ga1236-2015 standard
	Product dimension	(750mm x 114mm x 108mm)±5mm
	Transit case dimension	(700mm x 330mm x 180mm)±10mm
	Product weight	≤1.56kg±0.05kg
	Working temperature	-30℃~55℃
	Working humidity	Less than 93% and no condensate

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