



FINDER MK4

Life Sign Detection System

Life Detection Radar at a Glance.

A remotely operated system that searches for heart rate, respiration and movements of humans. This microwave radar uses unique algorithms which makes it possible to scan common construction materials, open spaces, voids and thresholds for signs of life.

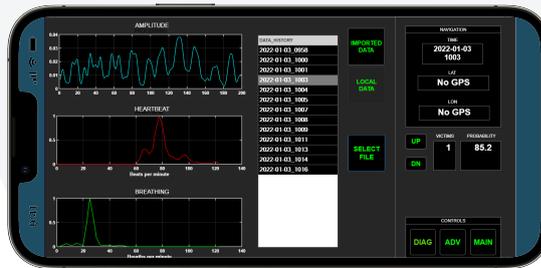
This system uses a camera targeting system that automatically switches between conventional optics and infrared for day and night operations. The MK4 system is designed specifically to augment a human's ability to detect life from a safe distance. This creates a layer of safety that keeps users away from harm.

The MK4 is sealed in a water tight IP67 shock proof case. If it is dropped in water it will float allowing for recovery and continuance of the users mission. The contents of the remote sensor package are protected by a sealed solid aluminum plate custom designed and fitted the engineers at Nanuk.

This man portable package is controlled remotely by using an on board encrypted wireless router up to 200 ft (60 m) away. Additionally, operating and monitoring the system can be accomplished by using the MK4 as an IoT device. Its IP Address and MAC ID can be added to modern radio networks that handle data.



The Finder MK4 is also vehicle or ground robot mountable. This system weights in at 8 lbs (3.6 kg). Finder is powered by a 12v 10 amp SLA style battery. This power source provides up to 12 hours of standby time and up to 150 scans with a full charge.



MK4 Software and Human Interaction Design Concepts

The MK4 operates on the most popular operating systems used today. Android, iOS, Linux, Mac OS and Windows devices to name a few. A simple downloaded APP connects the user to the device. The user interface has been designed to allow critical information to be found quickly. MK4 uses HCI "Human Interaction Concepts," used in the aviation industry. This allows its user to focus on their mission and spend less time looking down.

By using this modern approach, a synergy is created between the user and the technology. These concepts combined with color coding used in FAA Air Traffic Control displays, add to the synergy between the user and the device.

A large annunciator HUD is located at the top most area of the user interface. This allows the user to quickly glance down to observe all the critical information in less than three seconds. Software updates will continually add new function to this system.



FINDER MK4

Generation IV

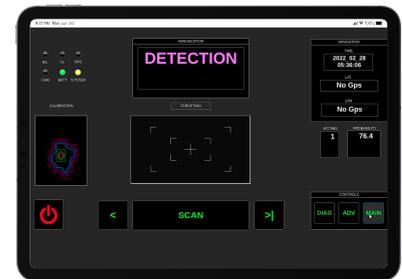
SPECOPS GROUP



MODEL: MK4-100-00A1

Model

System Type	Low Emitting Microwave Radar
Radar Type	Frequency Modulated Continuous Wave Radar (FMCW)
Radar Antenna Array	6160 - T651 Aluminum Alloy CNC Formed Chassis & Cover Plate.
Beam Width/Height	Elevation 35 deg, Azimuth 70 deg.
Operating Wavelength	3.15 GHz
Radioactivity	ICNIRP-1998 radiation exposure requirements compliant
Exterior Ethernet Port	IP 68 Threaded type Cat6 receptacle
Camera System	2.0 Megapixel HD 1080p, 120 fps, automatic Night infrared switching.
WiFi	IEEE 802.11ac b/g/n [Wavelength Ranges 2.4 GHz, 5 GHz]
Power Supply	Charging system: 4-Cell, 2.8A @ 12.8V LiFePO4 Charger [110 - 240V]
Battery	LiFePO4 13.2V 5sh, 66Wh
Scans Per Charge	Up to 150 Scans
Standby Time	12 Hours when remote sensor is left in the ON position.
Length of Scan	Approx. 1 Minute: 10 seconds
Target Types	Heart Rate, Respiration and Human Gross Movement Profiles
Scanning Mass Types	Common construction materials
Clear Air Range Operation Range	200ft (60m)
Temperature Range	-84° To +240°F [-64°C to +115°C]
Display	System runs on common smart phone, laptop or tablet
MK4 Remote Sensor Dimensions	14.9 x 12.13 x 9.58" [37.85 x 30.81 x 24.33cm]
MK4 Remote Sensor Weight	8 Lbs (3.6Kg.)



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INDUSTRIAL
TEMPERATURE

NANUK
PROFESSIONAL PROTECTIVE CASES

PX1-C441

Its small size, rugged design, and extended operational temperature make it a great fit for industrial IoT applications and embedded systems in the industrial

control, transportation, Mil/COTS, and energy markets. It includes up to 8 GB of soldered down LPDDR4 system memory and a non-removable eMMC device for solid-state storage of an operating system

(OS) and applications. In addition, the board supports M.2 and SATA devices. Intel Powered by Apollo Lake-I E3900 Processor Quad core.