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SATIR V90-T Gas
Detection
Camera

SATIR V90-T Gas Detection Camera Owner's Manual

Contents

SATIR V90-T Gas Detection Camera

Product Specifications

- **Model:** V90-T
- **Detector Resolution:** 640×512
- **Detector Type:** Cooled Quantum Well FPA
- **Thermal Sensitivity (N.E.T.D):** 60Hz Auto/Manual
- **High Sensitivity Level:** 3.2 ~3.5 m
- **Digital Zoom:** Yes
- **Responsivity:** 7min
- **Spatial Resolution:** 5 Megapixels CMOS, with LED HDMI
- **FOV:** 5.8 inch Capacitive Touch Screen
- **Frame Frequency:** IR/Digital/Duo-vision/Duo-vision Plus/ Picture in Picture
- **Focus Mechanism:** Auto/Manual
- **Spectral Range:** Yes
- **Super Resolution:** Yes
- **Start-up Time:** 10 colour palettes including Iron Red/Grey/Inverted Iron Red/Inverted Grey

Product Usage Instructions

Image Presentation
The V90-T features a digital camera output with a display screen and various image modes like IR/Digital/Duo-vision/Duo-vision Plus/PiP. It includes a viewfinder and thermal image adjustment capabilities along with text and voice annotation.

Temperature Measurement
The device offers temperature measurement features including a range, accuracy analysis, emissivity correction, optical transmission correction, and atmospheric transfer correction for precise thermal readings.

Data Storage
Data storage options include video storage, thermal image format (.jpg/.png), and visual image format (.jpg/.png) with support for a 32GB SD card for storage.

Power System
The V90-T is powered by a rechargeable Li-ion battery with a battery life of 2.5 hours. It comes with a 2 Bay Intelligent Charger, DC 12V 5A power supply, and supports sleep mode for power management.

Frequently Asked Questions (FAQ)

- **What gases are detected by the V90-T Gas Detection Camera?**
  - The V90-T can detect gases such as Benzene, Ethanol, Ethylbenzene, Heptane, Hexane, Isoprene, Methanol, MEK, MIBK, Octane, Pentane, 1-Pentene, Toluene, Xylene, Butane, Ethane, Methane, Propane, Ethylene, and Propylene.
- **Does the V90-T support additional features like Wi-Fi and Bluetooth connectivity?**
  - Yes, the V90-T includes additional features like Wi-Fi, GPS, Bluetooth 4G, alarm functionality, laser pointer with distance range measurement, and USB connectivity.
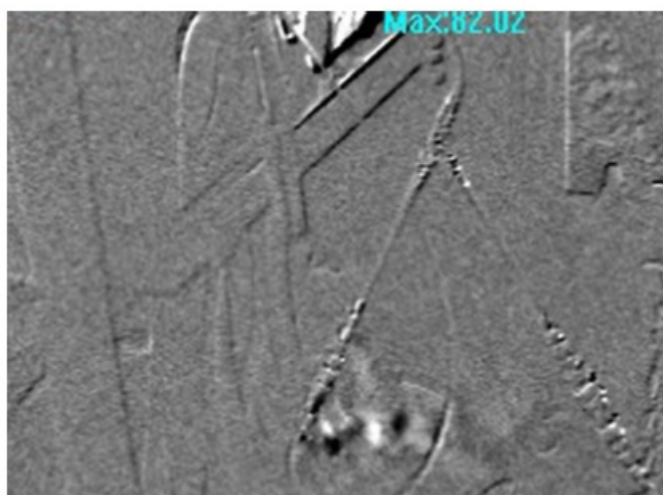
V90-T

Gas Detection

Introducing the New Gas Detection Camera from SATIR, following on from the V-Series range we have re-designed the new camera to improve the performance of the camera in terms of operation and ergonomics.

The V90-T has been designed with a new platform that enables easy operations and con-trol of the camera, we still incorporate both normal and gas mode operation for gas detection and normal inspection.

Key Features

- 640×480 IR Detector
- VOCs Gas Detection
- Built-in 5MP HD Digital Camera
- 10 Colour Palettes
- High Gas detection Sensitivity
- IR/Digital/Duo-vision/Duo-vision Plus/PiP

V90-T Specification

Model	V90-T
Image Performance	
Detector Resolution	640×512
Detector Type	Cooled Quantum Well FPA
Thermal Sensitivity (N.E.T.D)	0.015°C@30°C
High Sensitivity Level	7 levels in high sensitivity rapid monitoring mode
Digital Zoom	1X-8X
Responsivity	0.001 ml/s
Spatial Resolution	0.39mrad
FOV	15°x 11.25°
Frame Frequency	60Hz
Focus Mechanism	Auto/Manual
Spectral Range	3.2 ~3.5 μm
Super Resolution	Yes
Start -up Time	≤7min
Image Presentation	
Digital Camera	5 Megapixels CMOS, with LED
Output	HDMI
Display Screen	5.8 inch Capacitive Touch Screen
Image Mode	IR/Digital/Duo-vision/Duo-vision Plus/ Picture in Picture
View Finder	HD 0.6" color OLED, with zooming function
Palette	10 colour palettes including Iron Red/Grey/Inverted Iron Red/Inverted Grey
Thermal Image Adjustment	Auto/Manual

Text Annotation	Yes
Voice Annotation	Yes
Temperature Measurement	
Temperature Range	-40°C ~ + 500°C
Accuracy	±2°C or ±2%
Analysis	10 spots, 10 area boxes, 5 lines, auto-hot/auto-cold/average, Isotherm
Emissivity Correction	Variable from 0.01 to 1.0
Optical Transmission Correction	Manual/Auto
Atmospheric Transfer Correction	Auto
Data Storage	
Type	32GB SD Card
Video Storage	H.264 video/fully radiometric IR-video to SD card
Thermal Image Format	.jpg/.png
Visual Image Format	.jpg/.png
Power System	
Battery Type	Rechargeable Li-ion Battery
Battery Life	≥2.5hours
Charging System	2 Bay Intelligent Charger
Power Supply	DC 12V 5A
Power Management	Supports Sleep Mode

Physical Characteristics	
Weight (includes battery)	2.5kg
Dimensions	297.4x198x179.9 mm
Tripod Mounting	UNC1/4-20
Environmental Specification	
Storage Temperature Range	-40°C to +70°C
Operating Temperature Range	-20°C~50°C
Humidity	10%~95%, non-condensing
Encapsulation	IP54
Shock	Shock 30G
Vibration	2G
Gas Detection	
Gas Detected	Benzene, Ethanol, Ethylbenzene , Heptane, Hexane , Isoprene, Methanol, MEK, MIBK, Octane, Pentane,1-Pentene, Toluene, Xylene, Butane, Ethane, Methane, Propane, Ethylene, Propylene
Additional Features	
Optional Lens	24°
Laser Pointer	Class 2
Laser Range	10-1200 meters
Laser Range Distance	40m
Wi-Fi	Yes
GPS	Yes
Bluetooth	Yes
4G	Yes
Alarm	Yes
USB	Yes

Documents / Resources

SATIR V90-T Gas Detection Camera [pdf] Owner's Manual
V90-T, V90-T Gas Detection Camera, Gas Detection Camera, Detection Camera, Camera

References

- **User Manual**