

V80

Gas Detection Camera for SF6 Monitoring



The new V80 Gas Detection Camera from SATIR stands out as an innovative addition to the V-Series range. Engineered to effectively identify Hazardous gas including SF6 (full list shown below), this state-of-the-art Camera meets the current regulations for Leak Detection and Repair (LDAR) at electricity (SF6), chemical, government.

The V80 is equipped Cooled QWIP 320x256 infrared (IR) detector. This detector makes it an indispensable tool for sectors such as petrochemicals, refineries, and power plants, where precise gas detection is paramount.

V80 equipped with Atmospheric transmittance automatic based on Range, radiation rate/ emissivity, humidity, distance, ambient temp, reference body temp.

The V80 has been designed for a hazardous environment., meaning it meets stringent safety standards essential for reliable gas detection in unstable atmospheres. With extra port power interfaces, SD Card, Video output .MP4/.IRV, WiFi, Bluetooth, USB, Audio, and UNC1/4-20 mounting.



Key Features

- 5.8" Rotatable LCD, Viewfinder HD 0.6" color OLED
- Image Mode; IR image / Visual image (5MP) / Duo-vision / PIP
- Gas detection: Hazardous gases including SF6
- Thermal Resolution: Cooled 320x256
- Temperature Range: -20°C to 410°C.
- Accurate Measurement: $\pm 2^{\circ}\text{C}$ or 2%.
- Image Analysis: point, line, and area temperature measurement., Gas modes
- Additional Features: Wi-Fi, GPS, Bluetooth
- Designed for: professionals in the petrochemical, chemical, power stations and power industry

V80 Specifications

Camera Name	V80
Image Performance	
Detector Resolution	320x256
Detector Type	Cooled QWIP Detector
Thermal Sensitivity (N.E.T.D)	15mK (0.015°C@30°C)
High Sensitivity Level / pixel pitch	7levels in high sensitivity rapid monitoring mode at 25 micro meters
Digital Zoom	1x to 10x digital zoom
Responsivity	0.001 ml/s
Spatial Resolution	0.78 mRad
FOV	14.5°x 10.8°
Minimum focal length	0.18m
Frame Frequency	50 Hz
Focus Mechanism	Manual and Autofocus
Spectral Range	Thermal 7.0–14 μm Gas 10.3 ~10.7 μm
Focus Mode	Auto/Manual
Start -up Time	≤7min
Image Presentation	
Digital Camera	5MP CMOS Digital Camera with 1 LED Fill Lights
Output	HDMI
Display Screen	5.8 inch Capacitive Touch Screen
Image Mode	Infrared (IR), Digital, Duo-vision, Duo-vision Plus, Picture in Picture (PIP)
View Finder	Built-in HD0.6" color OLED (1024x768)
Palette	12 options (including Iron Red, Rainbow, Black Hot and White Hot, etc.)
Thermal Brightness / background	Auto/Manual with auto background correction (based on thermal background temp.)
Unit setting	Date/time, temperature unit °C/°F/K, language with GPS
Voice Note Annotation and audio	Yes
Temperature Measurement	
Temperature Range	-20°C ~ + 410°C
Accuracy	±2°C or ±2% of readings
Analysis	10 movable points, 10 boxes, min/max/avg analysis, 5 lines, isotherm, alarm (sound/color)
Emissivity Correction	Adjustable from 0.01 to 1.0
Optic Transmission / temp. Correction	Manual/Auto
GPS	Yes
Data Storage	
Type	32GB SDCard, storage method with single / dynamic record and optical IR image format
Video Storage	HD stored in the memory with MPEG4/H.264 format, up to 1h / segment
Thermal Image & Video Format	.jpg / .png format with 14-bit measurement data image and time storage
Power System	
Battery Type	Li-ion rechargeable (4 units)
Battery Life	up to 3h continuous (room temp.)
Charging System	2 Bay Intelligent Charger, DC14V3A power adapter charging
Charging Time	5 Hours
Power Management Support	Yes, Sleep Mode / power saving

Please be aware specifications can vary from time to time

Marley's Lane, Drogheda, Co. Louth, Ireland

V80 Specifications

Physical Characteristics	
Weight (includes battery)	Approx 3.7 kg (including battery)
Dimensions	292x148x138 mm
Tripod Mounting Support	Yes, 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(IEC60529) with EMC (electromagnetic compatibility)
Shock	Shock 25G (IEC 60068-2-27)
Vibration	2G
Gas Detection	
Gas Detected	Sulphur Hexafluoride, Acetyl Chloride, Acetic Acid, Allyl Bromide, Allyl Chloride, Allyl Fluoride, Ammonia (Nh3), Bromomethane, Chloride Dioxide, Ethyl Cyanoacrylate, Ethylene, Furan, Hydrazine, Methyl silane, Methyl Ethyl Ketone, Vinyl Cyanide, Methyl ketene Vinyl Ketone, Propene, Tetrahydrofuran, Vinyl Ether, Trichloroethylene, Uranyl Fluoride, Vinyl Chloride, Propenal, methyl bromide, acrolein, propylene, acrylonitrile, vinyl ether
Additional Features	
Optional Lens	7°/ 30°
Laser Pointer	Class 2
Laser Range	10-1200 metres
Laser Range Distance	40m
Wi-Fi	Yes
GPS	Yes
Bluetooth	Yes
4G	Yes
Alarm	Yes
Alarm Type	Audio
USB	Yes
Language	English
Accessories	Rechargeable lithium battery (Total 4 pcs) SD storage card Card reader Power adapter and charger, car power converter, U disk Calibration Test Report and certificate, earphone, video cable Warranty card Carrying Case Power Adapter
Analysis Software	Yes

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