

TI330+

Gas Thermal Imaging Camera for CH₄ Gas Leakage Detection

TI330+ is with cooled detector(QWIP, NETD<25mK) to detect CH₄ gas leaks and pinpoint the gas leaks location accurately, also offers temperature measurement. It is a multifunctional device for gas leakage detection and thermograph applications.

Features

Cooled QWIP detector, sensitivity $\leq 0.025^{\circ}\text{C}$, pinpoint gas leaks location quickly

Dual-application: Gas leakage detection and thermograph application

Temperature range: $-20^{\circ}\text{C} \sim +350^{\circ}\text{C}$

Interchangeable lenses available

Built-in 5.0 MP digital camera

Folding and 270° rotatable display



Applications

Industry: refinery, natural gas processing facility, offshore oil/gas exploration platform, chemical industry, etc.

Research Institute

Technical Specifications

Item	TI330+
Detector Data	
Type	Cooled QWIP
IR resolution	320×256
Pixel pitch	30um
Spectral range	3.1~3.5um
NETD/Sensitivity	25mK
SF ₆ gas sensitivity	≤0.001ml/s
Lens	
FOV/Focal distance	10°×7.5°/55mm
Minimum imaging distance	2m
IFOV	0.55mrad
Minimum imaging distance	Auto/Motor/Manual
Image Performance	
Display	5", color LCD, 640×480 pixels
Frequency	50Hz/60Hz
Digital zoom	1X~8X continuous
Color palletes	12 palletes(including iron, rainbow, white hot and black hot etc.)
Contrast/brightness	Auto/Manual
Measurement	
Temperature range	-20℃~+350℃
Temperature accuracy	±2℃/±2%(reading)
Spotmeter	10 adjustable spots
Line profile	Vertical/Horizontal
Area	5 adjustable boxes with max./min./avg. temperature value
Isotherms analysis	Capture high/low temperature/interval
Alarm	Voice, color
Measurement correction	Auto/Manual
Emissivity correction	Adjustable from 0.01 to 1.0 or selected from list of materials
Background temperature correction	Auto
Atmospheric transmissivity correction	Auto
Setting function	Date/time, temperature unit, °C/°F/K, language
Languages	10 languages(English, French, Italian, German, Spanish, Portuguese, Russian, Korean, Japanese, Simplified Chinese & Traditional Chinese)
Image Storage	
Storage card	8G SD card(can be extended to 32G)
Video output	Card reader, USB, WIFI
Storage mode	Store signal frame image or dynamic video auto/manual
IR image format	JPEG, 14-bit measurement data image included
Visual light image format	Single frame, JPEG
Video storage	High definition video stored in SD card(MPEG4/H.264 format), recording time up to 1 hour for per video
Voice annotation	40s voice record, stored with per image
Periodic image storage	10s to 24h
Laser Point	
Grade/Type	Class 2, 1mW/635nm Red
Interfaces	
Power	Yes
SD card slot	Yes
Video output	CVBS
Audio output	Yes
Tricod	1/4" -20
Power System	
Battery type	Rechargeable Li-ion battery
Battery operation time	2h
DC supply	DC: 12V
Charging system	In camera, AC adapter, car charger
Power saving	Yes
Environment Parameters	
Operation temperature range	-15℃~+40℃
Storage temperature range	-20℃~+50℃
Humidity	≤95%(Non-condense)
EMC	EN61000-6-4&EN61000-6-2, FCC47CFR Part15 classA, EN61000-4-8, L5
Vibration	2G(IEC60068-2-6)
Shock	25G(IEC60068-2-29)
Encapsulation	IP54(IEC60529)
Physical Data	
Size(L×W×H)	308mm×142mm×166mm
Weight	≤2.5kg(with standard lens)
Main Gas Detection	CH ₄ , benzene
Packing	
Standard	Thermal imaging camera with standard 10"standard len, USB WIFI module, 2 Li-ion batteries, battery charger, adapter, car, charger, SD card, SD card, reader, software CD, warranty card, certificate, calibration book
Optional accessories	Laptop, SLR camera