

日本AVIO全新鏡頭自由分離式

FREE STYLE

紅外線熱影像儀 “Thermo FLEX F50”

全觸控螢幕

直覺式觀測與操作
適合初次使用者



自由分離式 攝影鏡頭

滿足於各種場合的熱像運動



"Angle-Free 任意指向" 攝影鏡頭

- 可克服被測設備的狹窄空間或角落限制來運用並發覺潛在風險
- 可以傾斜攝影鏡頭，量測高角度溫度分布位置
- 攝影鏡頭可以手握並自由分離而繞過設備狹小空間量測後方熱像

創新獨特的"Angle-Free 自由角度"熱影像鏡頭，可搭配使用"鏡頭旋轉"和"鏡頭分離"測量操作。
"Thermo FLEX F50"有助於檢查設備的潛在風險，提高量測效率



"FREE STYLE" 紅外線熱影像儀提供多樣化的使用方式 "Thermo FLEX F50" 新型的熱影像儀具有自由分離的攝影鏡頭和直覺式觸控

主機螢幕控制各項先進功能，讓您可以在各種測量場合中使用！



鏡頭旋轉：可將攝影鏡頭裝在控制主機側邊卡榫，任意旋轉鏡頭方向。



鏡頭分離：從主機分離攝影鏡頭，自由自在握持鏡頭。



攝影鏡頭和主機雙配備標準三角架螺絲孔，可以穩固地安裝在三角架上。

"仰視"、"俯視"、"旋轉"、"吸附"、"放入"- 以任何形式自由自在地拍攝熱像！ 即使身處狹窄空間和設備內部都能有效進行熱像測量



旋轉鏡頭可以旋轉與傾斜，提供便利舒適的拍攝握持方式，不必隨主機螢幕而限制高角度拍攝的不便。



您可以拆卸並手握攝影鏡頭，從任何角度舒適地觀測分析熱像時，並隨意移動鏡頭拍攝並儲存熱像影片於記憶體內。



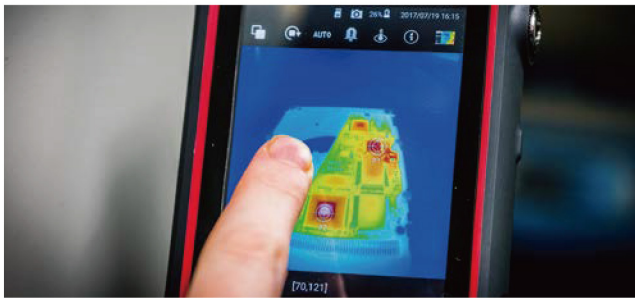
您也可以將攝影鏡頭安裝在具有固定座的頭盔上也可以安裝在市...面拍攝伸縮桿上。

簡單直覺地觀測與使用觸控式螢幕 進行主機各項功能操作

此外，您可以使用多樣實體按鍵操作甚至佩戴防護手套也可以使用。我們更優化了顯示控制流程，使您在任何場合和任何角度都能舒適地操作。



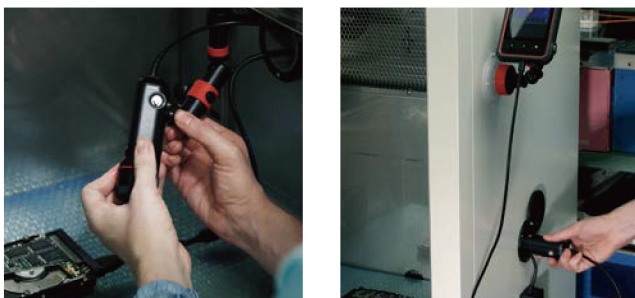
簡易的觸控操作，即使是初學者也容易上手



觸控操作“溫度刻度設定”，“點測量”功能。直觀的操作讓熱像測量變得更貼近使用者感受且更有效率。

滾滾長江東逝水

配備耐熱高達70°C的攝影鏡頭



小型攝影鏡頭可以放入像恆溫槽設備中。量測時，鏡頭接線可以通過機槽管線孔，連接恆溫機構外的主機，使用者直接觸控主機螢幕進行遠端操作。

輕鬆的實體按鍵讓操作使用時戴著防護手套也沒問題



通過實體按鍵可以進行“溫度比例設定”，“攝錄像”等的常用操作功能。即使佩戴手套，也可以舒適的單手測量操作。

上圖使用照相機孔徑的磁性架來固定攝影鏡頭



攝影鏡頭和主機可以安裝在三腳架上或使用吸盤座或磁性座等固定於機台牆面上，讓測試時鏡頭更穩固且更易於觀測目標物。鏡頭和主機都具備雲台孔，方便支援市面上多種商用攝影器具配件使用。

Thermo FLEX F50



Customize button

Customized buttons for more efficient measurements

You can set frequently used functions to three buttons.



Assignable functions

- Light ON / OFF • Image rotation • Composite display switching
- Auto scale ON / OFF • Temperature alarm ON / OFF
- Color alarm ON / OFF • Information ON / OFF
- Menu display ON / OFF • Switch to preview
- Thumbnail switching • Live mode switching

Default

- Blue: LED light ON / OFF • Green: Auto scale • Yellow: image rotation

Infrared Thermal Imaging Camera InfReC F50 series: Specification BAS: Basic, STD: Standard, ONL: Online

	Basic model (with main basic functions)		Standard model		Online model			
	F50A-BAS	F50B-BAS	F50A-STD	F50B-STD	F50A-ONL	F50B-ONL		
Basic Performance	Field of View*1	35°×35°	70°×70°	35°×35°	70°×70°	35°×35°	70°×70°	
	Spatial Resolution	2.8mrad	5.3mrad	2.8mrad	5.3mrad	2.8mrad	5.3mrad	
	Focal Distance	30cm to infinity*2	10cm to infinity*3	30cm to infinity*2	10cm to infinity*3	30cm to infinity*2	10cm to infinity*3	
	Focus	Focus Free						
	Infrared Detector	Uncooled Focal Plane Array (Microbolometer)						
	Spectral Range	8 to 14μm						
	Recording Pixels	240×240 pixels						
	Frame Rate	7.5Hz						
	Measuring Range	-20°C to 350°C*4						
	Sensitivity (NETD)	0.05°C at 30°C						
Accuracy	±2°C or ±2% (Indicated Value)*5							
Image Display	Auto Function	Auto Scale / Auto MAX / Auto point						
	Color Palettes	7 palettes (Olive, Rainbow, Brightness, Hot-white, Hot-black, etc.)						
	Gradation	256 / 128 / 64 / 16 grade						
	Visible Camera	CMOS camera 5M pixels						
	Visible/Thermal Fusion	Picture-in-Picture (with trimming function), Blending (transparency changeable, size & position adjustable)						
Measuring Functions	Display Functions	1 to 4 times continuous digital zoom (Thermal, Visible, Fusion)						
	Alarm Function	Alarm Display, Alarm Sound, Color Alarm, Alarm Recording						
	Temperature Correction	Emissivity (Full image, Multi-point), Environmental/Background, Emissivity Table						
	Point Temperature	5 Movable Points, Temperature Search:MAX/MIN x1 each						
	Temperature Display in Assigned Region	---		BOX × 1 (MAX, MIN and AVG in Box)				
Storage & Output	Line Profile	---		Line × 1				
	Delta Temp	---		Delta T × 1				
	Storage Device	micro-SD Card, Conforms to SDHC						
	Data Storage	Data Form	Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image					
		Continuous Recording	---		Max 7.5Hz (Up to 10 sec.)			
		Interval Recording	---		3 sec to 60 min interval, with Visible Image recorded			
		Trend Graph	---		csv format			
		Line Profile	---		csv format			
		Voice Recording	30 sec Recording, replay per a Thermal image					
	Text Annotation	Annotate up to 128 Characters per a Thermal Image, Characters imported from SD Card						
Interface	File Transfer	USB2.0 (MTP)						
	Real Time Transfer	---		USB2.0 Image transfer (Thermal Image with visible image, Maximum transfer speed 7.5Hz)*6				
Others	Display	4.8 inch HD (720 × 1280 pixels), Touch Panel						
	Auxiliary	LED Light (equipped Camera Unit)						
	Environment Resistance	Operating Temperature & Humidity	Camera Unit : -20°C to 70°C, 90%RH (non-condensing) / Controller Unit : -20°C to 50°C, 90%RH (non-condensing)					
		Storage Temperature & Humidity	Camera Unit : -40°C to 60°C, 90%RH (non-condensing) / Controller: Unit : -40°C to 60°C, 90%RH (non-condensing)					
		Drop, Vibration & Shock	Engineered to withstand 1m drop, 29.4m/s ² (3G), 294m/s ² (30G)					
	EMC	Dust & splash proof	Protection class IP64 equivalent					
		EMC	Conforms to CE regulations (Class A)					
	Power Supply	Battery	Lithium-ion (built-in), Battery Operation: 4 hours (Typ.) (with power saving mode)					
		AC Adapter	100V - 240V AC, 50/60Hz (AC Adapter by USB cable, micro B connector)					
	Dimensions	Camera Unit : Approx. 30mm×40mm×130mm (excluding projection and cable) / Controller Unit : Approx. 169mm(H)×92mm(W)×24.5mm(D)(excluding projection and cable)						
Weight	Camera unit : Approx. 100g / Controller unit : Approx. 400g (excluding cable)							
Accessory	Carrying case, micro SD Card Adapter, USB AC Adapter, micro USB cable (for power feeding and connection), Neck Strap, Operation Manual, Software(NS9500LT)							

*1 Tolerance : ±5% *2 For temperature accuracy : 100cm to infinity *3 For temperature accuracy : 30cm to infinity *4 Only camera Unit at the environmental temperature from 15 to 70°C. Condition at the environmental temperature from -20 to less than 15°C, measuring range is -20 to 300°C. *5 Environmental temperature : 0 to 40°C (other conditions : ±4°C or ±4%) *6 In order to transfer Thermal motion image by F50A-ONL/F50B-ONL, it is required to upgrade to "InfReC Analyzer NS9500 Professional" (optional software) *This product is subject to the United States' Export Administration Regulations (EAR) for the reason that it incorporates U.S.-made components and parts. Depending on its destination or subsequent user's purpose or business, U.S. Government assessment and authorization prior to re-exporting, reselling or retransferring might be required. For details please consult our sales staff. *Company names and product names used are trademarks or registered trademarks of each company. The screen in the catalog is a fitting synthesis. •Description of specifications, designs, prices, etc. may be changed without notice for improvement. The color of the photograph may differ slightly from the actual product color because of printing.

 **NIPPON AVIONICS CO., LTD.**
<http://www.avio.tw>

Infrared Thermography Division **TEL: +81-3-5436-1375 FAX: +81-3-5436-1393**
 Sales department Gotanda Kowa Bldg., 1-5, Nishi-Gotanda 8-chome, Shinagawa-ku, Tokyo 141-0031, Japan

Chubu Branch **TEL: +81-52-951-2926 FAX: +81-52-971-1327**
 Nakato Marunouchi Bldg., 17-6, Marunouchi 3-chome, Naka-ku, Nagoya-shi, Aichi 460-0002, Japan

Nishi-Nippon Branch **TEL: +81-6-6304-7361 FAX: +81-6-6304-7363**
 Shin-Osaka CSP Bldg., 9-1 Nishi Nakajima 1-chome, Yodogawa-ku, Osaka-shi, Osaka 532-0011, Japan



WARNINGS & CAUTIONS

• Before using product, please carefully read the provided Operation Manual "WARNINGS & CAUTIONS" section to ensure proper operation. • Please do not place the product in high temperature, high humidity or high inert gas environments.



開昌貿易股份有限公司

KAIZER TRADING CO.,LTD

www.kaizer.com.tw

總公司：台北市中山區松江路71號7樓
 電話：(02)2506-0980, Email：sales1@kaizer.com.tw
 台中分公司：電話：(04)2313-5022, Email：taichung@kaizer.com.tw
 高雄分公司：電話：(07)721-1626, Email：kaohsiung@kaizer.com.tw