

Synchronous DFOV LWIR Gimbal

Gimbal System for Thermographic Inspections with HD Resolution

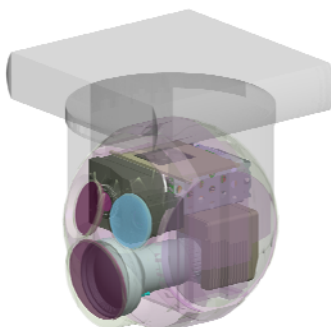


WFOV LWIR thermogram (640 x 512) IR pixels



NFOV LWIR thermogram (1,024 x 768) IR pixels

Proven hardware components



Gimbal arrangement



Cooled WFOV LWIR camera



Colour HD camera

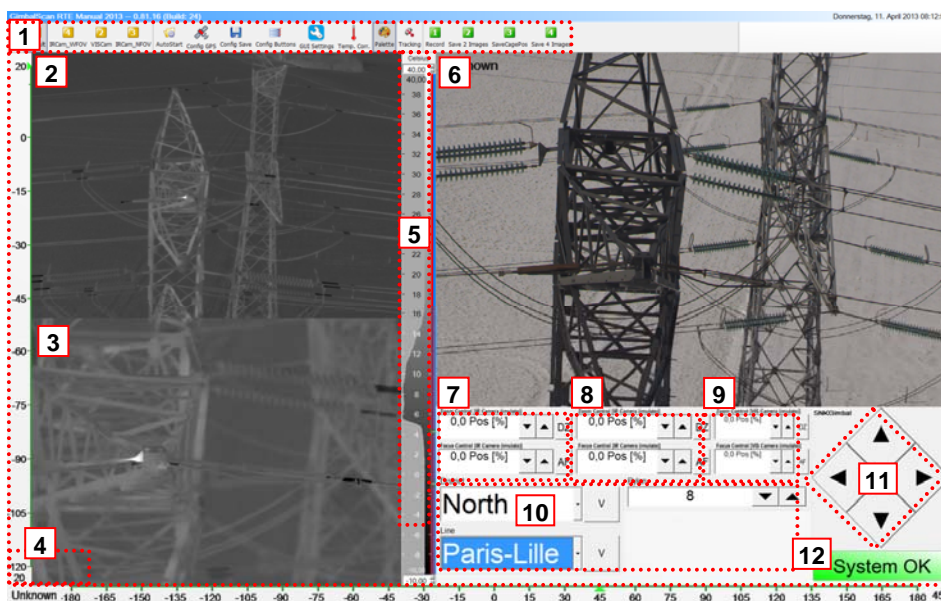


Uncooled NFOV LWIR camera



Gimbal SWE 400

Powerful software solution GimbalScan®



- 1) Control and setting buttons
- 2) Image of cooled WFOV thermographic camera
- 3) Image of uncooled NFOV thermographic camera
- 4) Gimbal status and position display
- 5) Temperature scale and temperature display control
- 6) Image of colour video camera
- 7) Focus control of the NFOV thermographic camera
- 8) Focus control of the WFOV thermographic camera
- 9) Focus control of the colour video camera
- 10) Filename manager
- 11) Gimbal control buttons
- 12) System status

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Gimbal System for Thermographic Inspections with HD Resolution

Technical specification

NFOV thermographic camera	VarioCAM® HD head short
Spectral range	(7,5 ... 14) μm
Detector	Uncooled Microbolometer Focal Plane Array
Detector format (IR pixels)	(1,024 x 768)
Measurement accuracy	+/- 1.5 K or +/- 1.5 %
Temperature resolution @ 30 °C	Better than 0.05 K
Frame rate	30 Hz
Dynamic range	16 Bit
120 mm super tele lens	FOV: (8 x 6)°; IFOV: 0.14 mrad; F1.0
Temperature measuring range	(-40 ... 200) °C; optional up to 1,200 °C
WFOV thermographic camera	ImageIR® 8800 open frame
Spectral range	(8 ... 10) μm
Detector	Cooled MCT Focal Plane Array
Detector format (IR pixels)	(640 x 512)
Measurement accuracy	\pm 1.0 K or \pm 1.0 %
Temperature resolution @ 30 °C	Better than 0.03 K
Frame rate	50 Hz; optional up to 100 Hz
Dynamic range	16 Bit
25 mm lens	FOV: (23 x 19)°; IFOV: 0.6 mrad
Temperature measuring range	(-40 ... 200) °C
Colour HD camera	Colour camera module SONY FCB-EH6300
Image sensor	1/3" wide dynamic HD CMOS sensor
Effective pixels	Approx. 2 Megapixels
Lens	20 x optical zoom; HFOV (55 ... 2.9)° at 1080p/30
Digital zoom	12 x
System software	GimbalScan®
PC system	Ruggedized Laptop; Intel® Core™ i7; Windows® 7
Camera interface	3 x GigE
Desktop resolution	(1,920 x 1,080); optional (1,920 x 1,200)
Parallel data acquisition	WFOV, NFOV, VIS single images and sequences
Gimbal system	SWE 400 Triple
Dimensions	400 mm diameter
Gimbal stabilization	Better than 25 μrad
Flight standard	RTCA 160D
Gimbal mount	Tyler nose mount