

## Synchronous DFOV LWIR Gimbal

### Gimbal System for Thermographic Inspections with HD Resolution

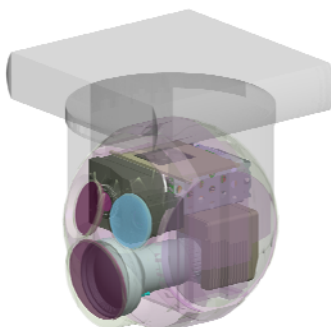


WFOV LWIR thermogram (640 x 512) IR pixels



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

#### Proven hardware components



Gimbal arrangement



Cooled WFOV LWIR camera



Colour HD camera

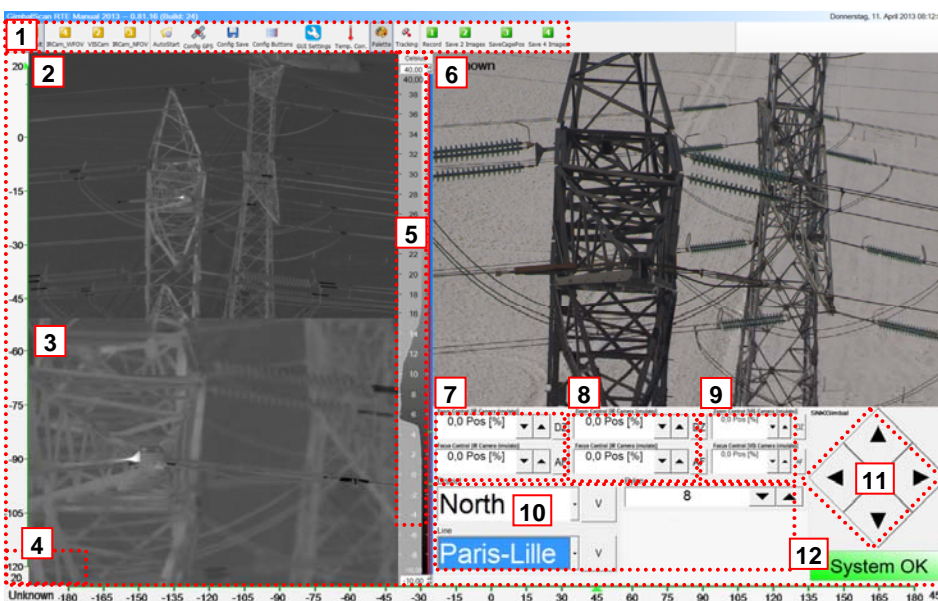


Uncooled NFOV LWIR camera



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

# Synchronous DFOV LWIR Gimbal

## Gimbal System for Thermographic Inspections with HD Resolution

### Technical specification

<b>NFOV thermographic camera</b>	<b>VarioCAM® HD head short</b>
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
<b>WFOV thermographic camera</b>	<b>ImageIR® 8800 open frame</b>
Spectral range	(8 ... 10) µm
Detector	Cooled MCT Focal Plane Array
Detector format (IR pixels)	(640 x 512)
Measurement accuracy	± 1.0 K or ± 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
<b>Colour HD camera</b>	<b>Colour camera module SONY FCB-EH6300</b>
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
<b>System software</b>	<b>GimbalScan®</b>
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
<b>Gimbal system</b>	<b>SWE 400 Triple</b>
Dimensions	400 mm diameter
Gimbal stabilization	Better than 25 µrad
Flight standard	RTCA 160D
Gimbal mount	Tyler nose mount