

Part number:

**61002-1103**

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Legal disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply.

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**Imaging and optical data (thermal camera)**

IR resolution	320 × 240 pixels
Thermal sensitivity/NETD	< 0.05°C @ +30°C (+86°F) / 50 mK
Field of view (FOV) / Minimum focus distance	25° × 18.8° / 0.4 m (1.31 ft.)
Focal length	18 mm (0.7 in.)
Spatial resolution (IFOV)	1.36 mrad
Lens identification	Automatic
F-number	1.3
Image frequency	30 Hz
Focus	Automatic or manual (built in motor)
Zoom	1–8× continuous, digital, interpolating zooming on images

**Detector data (thermal camera)**

Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–13 μm
Detector pitch	25 μm
Detector time constant	Typical 12 ms

**Measurement (thermal camera)**

Object temperature range	–20 to +120°C (–4 to +248°F) 0 to +350°C (+32 to +662°F)
Accuracy	±4°C (±7.2°F) or ±4% of reading

**Measurement analysis (thermal camera)**

Spotmeter	10
Area	10 boxes with max./min./average/position
Isotherm	1 with above/below/interval
Atmospheric transmission correction	Automatic, based on inputs for distance, atmospheric temperature and relative humidity
Optics transmission correction	Automatic, based on signals from internal sensors
Emissivity correction	Variable from 0.01 to 1.0
Reflected apparent temperature correction	Automatic, based on input of reflected temperature
External optics/windows correction	Automatic, based on input of optics/window transmission and temperature
Measurement corrections	Global and individual object parameters

**Alarm (thermal camera)**

Alarm functions	6 automatic alarms on any selected measurement function, camera temperature
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**Set-up (thermal camera)**

Color palettes	Color palettes (BW, BW inv, Iron, Rain)
Set-up commands	Date/time, Temperature°C/°F

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## Imaging and optical data (visual camera)

Field of view (FOV)	57.8° (H) to 1.7° (V)
Focal length	3.4 mm (wide) to 122.4 mm (tele)
F-number	1.6 to 4.5
Focus	Automatic or manual (built in motor)
Optical Zoom	36x continuous
Electronic Zoom	12x continuous, digital, interpolating

## Detector data (visual camera)

Focal Plane Array (FPA)	1/4" Exview HAD CCD
Effective pixels	380,000

## Technical specification (pan & tilt)

Azimuth Range	Az velocity 360° continuous, 0.1 to 60°/sec max
Elevation Range	El velocity +/- 45°, 0.1 to 30°/sec. max
Programmable presets	128
Automatic heaters	Clears window from ice. Switched on at +4°C (39°F). Switched off at +15°C (59°F).

## Ethernet (complete system)

Ethernet	Control, result and image
Ethernet, type	100 Mbps
Ethernet, standard	IEEE 802.3
Ethernet, connector type	RJ-45
Ethernet, communication	TBA
Ethernet, video streaming	Two independent channels for each camera - MPEG-4, H.264, or M-JPEG
Ethernet, protocols	Ethernet/IP, Modbus TCP, TCP, UDP, SNMP, RTSP, RTP, HTTP, ICMP, IGMP, ftp, SMTP, SMB (CIFS), DHCP, MDNS (Bonjour), uPnP

## Composite video (complete system)

Video out	Composite video output, NTSC compatible
Video, standard	CVBS (SMPTE 170M NTSC)

## Power system (complete system)

Voltage	24 VAC (21-30 VAC) 24 VDC (21-30 VDC)
Power	24 VAC: 215 VA max w/heater 24 VDC: 195 W max w/heater

## Environmental data (complete system)

Operating temperature range	-25°C to +50°C (-13°F to +122°F)
Storage temperature range	-40°C to +70°C (-40°F to +158°F)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)
EMC	<ul style="list-style-type: none"> <li>EN 61000-6-2 (Immunity)</li> <li>EN 61000-6-3 (Emission)</li> <li>FCC 47 CFR Part 15 Class B (Emission)</li> </ul>
Encapsulation	IP 66 (IEC 60529)
Bump	5 g, 11 ms (IEC 60068-2-27)
Vibration	2 g (IEC 60068-2-6)

## Physical data (complete system)

Weight	17.8 kg (39.3 lb.)
Size (L x W x H)	460 x 467 x 326 mm (18.1 x 18.4 x 12.8 in.)
Base mounting	TBA
Housing material	Aluminum



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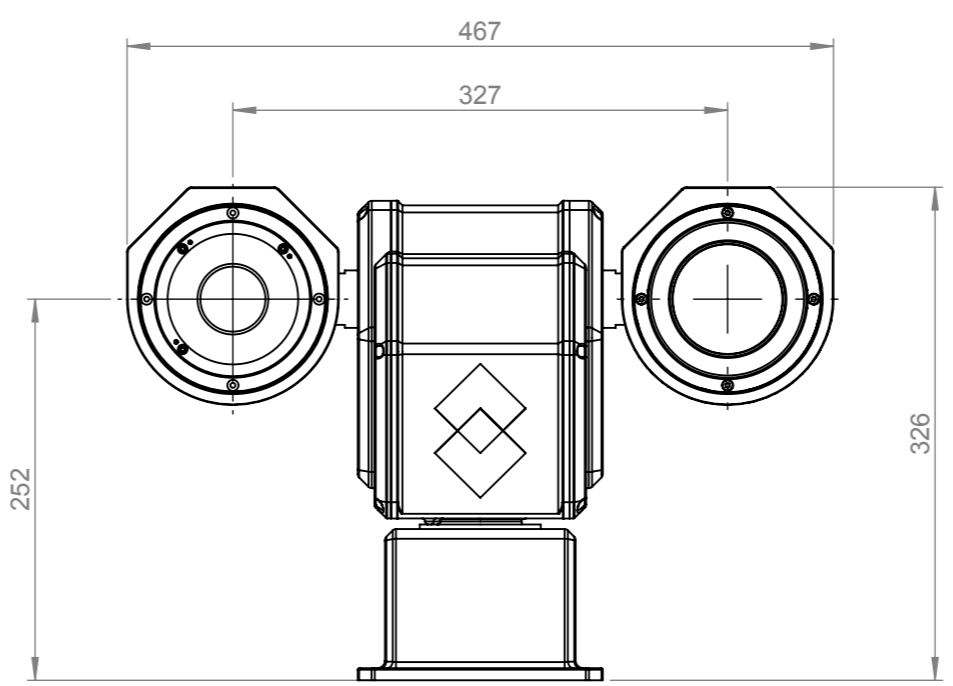
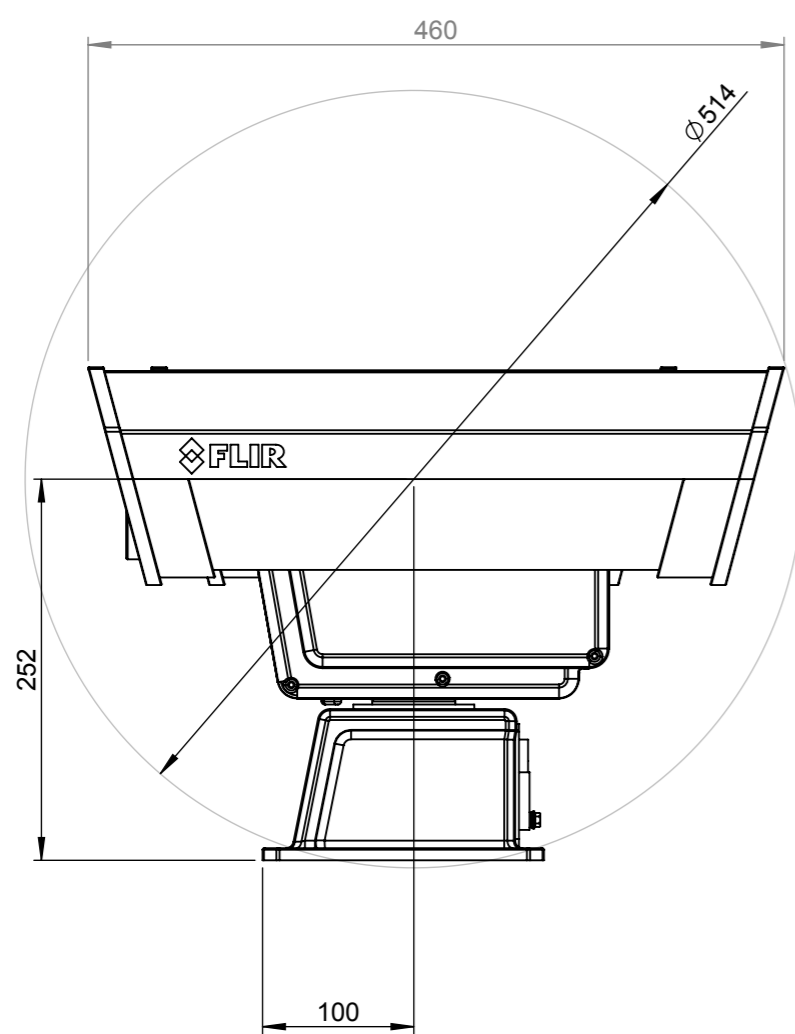
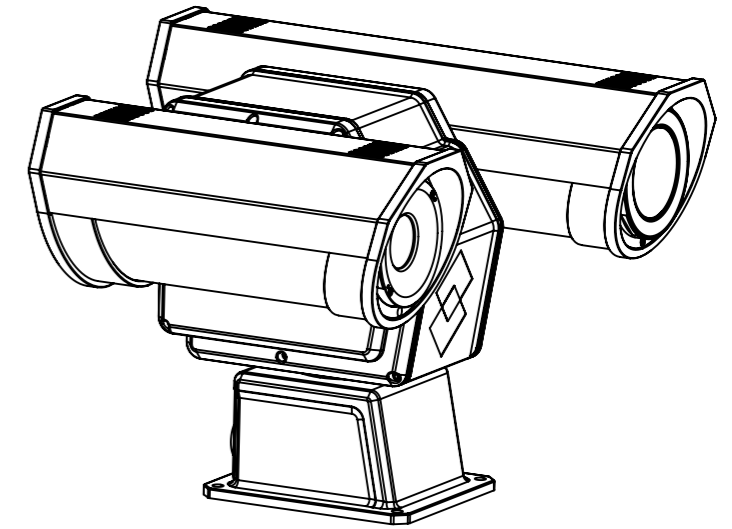
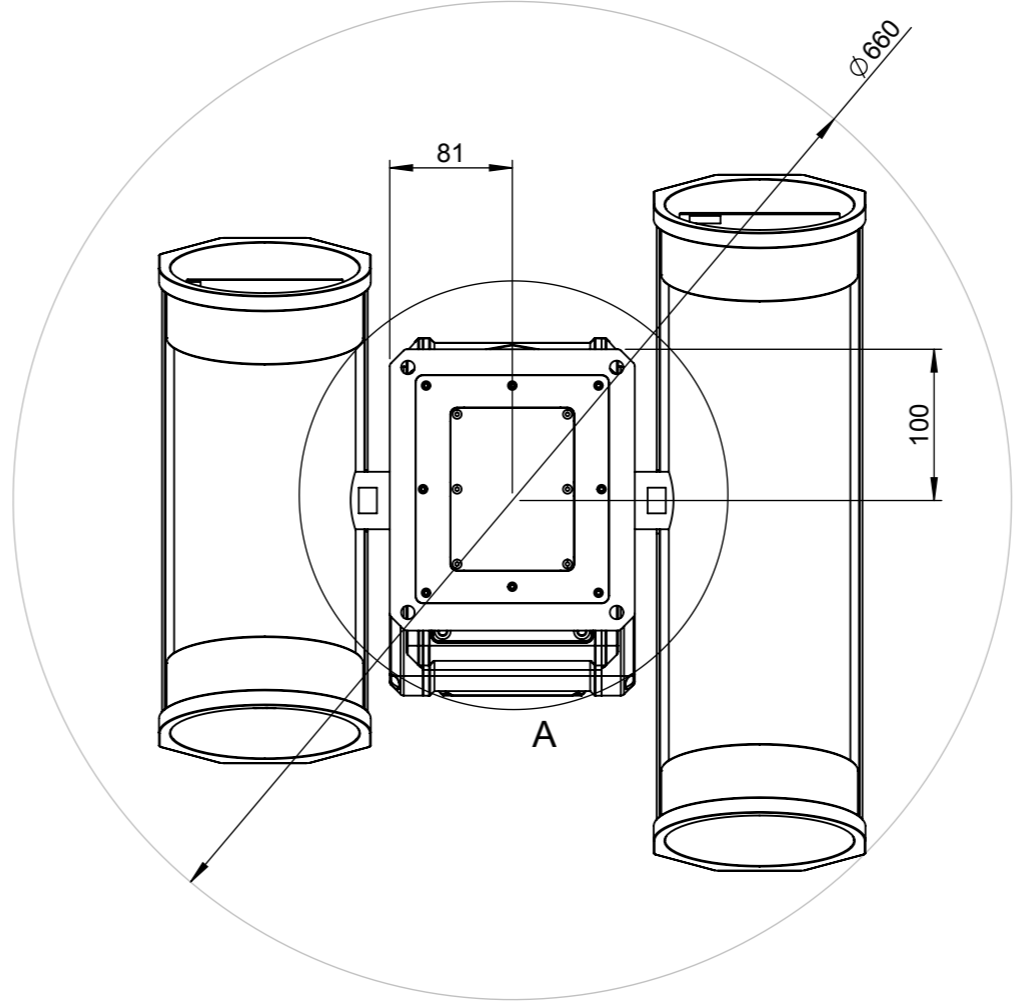
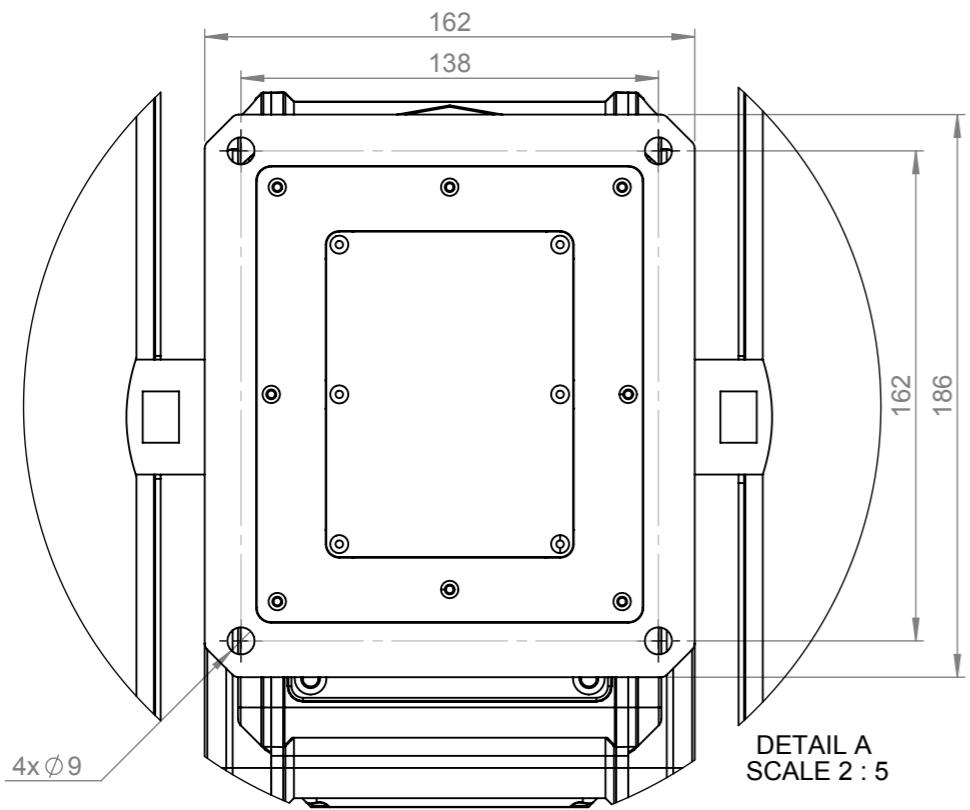
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**Scope of delivery (complete system)**

- Cardboard box
  - Pan & tilt with infrared camera including lens and visual camera
  - Calibration certificate
  - Downloads brochure
  - FLIR Sensors Manager CD-ROM
  - Lens cap
  - Printed Getting Started Guide
  - Printed Important Information Guide
  - Service & training brochure
  - Small accessories kit
  - User documentation CD-ROM
  - Registration card
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Konstr/Drawn <b>H. ÖSTLING</b>	Datum/Date <b>2011-10-31</b>	Kontr/Check <b>ULGU</b>	Material	
Ändrad av/Modified by <b>H. ÖSTLING</b>	Ändrad/Modified <b>2011-11-28</b>	Ytjämnhet/Roughness Ra - µm	Ytbehandling/Surface treatment -	
Där ej annat anges/Unless otherwise stated Gen tol <b>ISO 2768-mK</b> Utdrag ur/Excerpt from ISO 2768-m	Benämning/Denomination <b>DIMENSIONAL DRAWING PT</b>		Skala/Scale <b>1:5</b>	Blad/Sheet <b>1(1)</b>
0,5-6 ±0,1 Hålkälsradier (6)-30 ±0,2 Fillet radii (30)-120 ±0,3 (120)-400 ±0,5 Kanter brutna (400)-1000 ±0,8 Edges broken			ArtNo.	Size <b>A3</b>
			Ritn nr/Drawing No <b>T127400</b>	Rev <b>B</b>