

ELECTRO-OPTICS AND SURVEILLANCE SOLUTIONS



HOMELAND SECURITY

COASTAL SURVEILLANCE

CRITICAL INFRASTRUCTURES

ADVANCED SOLUTIONS



TCIB1 Thermal Camera Series



Resolution: 1280x1024, 640x512
 Sensor type: Vanadium oxide
 Wavelength: 8-14µm.
 NETD Sensitivity: <35mk/f.1.0, 50Hz, 300K Pixel pitch: 12µm.
 Frames/Second: 30fps.
 Video compression: H.265, H.264, Mjpeg Video output:
 Digital
 Lenses: 13/19/25/35/50mm.
 Athermal lenses
 Onvif 2.6, Profile S
 Network: 10/100 Ethernet Alarm I/O, RS485
 Power: DC, POE (Optional) Fire detection
 Standard video analytics IP67/IK10

TCIB1 Thermal Camera Series



Resolution: 1280x1024, 640x512
 Sensor type: Vanadium oxide
 Wavelength: 8-14µm.
 NETD Sensitivity: <35mk/f.1.0, 50Hz, 300K Pixel pitch: 12µm.
 Frames/Second: 30fps.
 Video compression: H.265, H.264, Mjpeg Video output:
 Digital, Analogue
 Lenses: 13/19/25/35/50mm.
 Athermal lenses
 Onvif 2.6, Profile S
 Network: 10/100/1000 Ethernet Alarm I/O, RS485
 Power: DC, POE+
 Fire detection
 Advanced video analytics IP67/IK10

TCID6 Thermal Multisensor Speed Dome Series



Thermal resolution: 640x512
 Day/night resolutions: 1920x1080
 Sensor type: Vanadium oxide
 Wavelength: 8-14µm.
 NETD Sensitivity: <35mk/f.1.0, 50Hz, 300K Pixel pitch: 12µm.
 Day/night sensor min lux: 0.001 lux Frames/Second: 30fps.
 Video compression: H.265, H.264, Mjpeg
 Video output: Digital
 Thermal Lenses 25mm.
 Day/night zoom lens 6-210mm.
 Onvif 2.6, Profile S
 Network: 10/100 Ethernet
 Alarm I/O, RS485
 Power: AC24v.
 Motion detection, Heat thermal autotracking* Standard
 video analytics, defogging, EIS
 Fire detection
 * Optional

TCID6 Thermal Multisensor Speed Dome Series



Thermal resolution: 640x512
 Day/night resolutions: 1920x1080
 Sensor type: Vanadium oxide
 Wavelength: 8-14µm.
 NETD Sensitivity: <35mk/f.1.0, 50Hz, 300K Pixel pitch: 12µm.
 Day/night sensor min lux: 0.001 lux Frames/Second: 30fps.
 Video compression: H.265, H.264, Mjpeg
 Video output: Digital
 Thermal Lenses 55mm.
 Day/night zoom lens 6-210mm.
 Onvif 2.6, Profile S
 Network: 10/100 Ethernet
 Alarm I/O, RS485
 Power: AC24v.
 Motion detection, Heat thermal autotracking* Standard
 video analytics, defogging, EIS
 Fire detection
 * Optional

THC7 D/N Laser PT Series



Resolution: 2mp. / 8mp.
 Up to 365mm. optical zoom Frames/Second: 25/30fps.
 Video compression: H.265, H.264, Mjpeg Video output:
 Digital
 Laser illuminator: 1000m. / 2000m.
 Onvif 2.6, Profile S
 Network: Giga Ethernet
 Alarm I/O, RS485
 Pan: 0.1-80°/Sec., Elevation 0.1-40°/Sec.
 Pan: 360°, Elevation -90/90°
 All worm gear drive / Accuracy 0,01° Power: 24v.DC
 Standard video analytics
 IP66 / Working temp.: -35/65°C.
 Military connector

TCIB1 Thermal Camera Series



D/N Resolution: 2mp. / 8mp.
 D/N up to 365mm. optical zoom
 Thermal resolution: 640x512 / 1280x1024 Thermal up to
 55mm. (Athermal lenses) Frames/Second: 25/30fps.
 Video compression: H.265, H.264, Mjpeg Video output:
 Digital
 Onvif 2.6, Profile S
 Network: Giga Ethernet
 Alarm I/O, RS485
 Pan: 0.1-80°/Sec., Elevation 0.1-40°/Sec.
 Pan: 360°, Elevation -90/90°
 All worm gear drive / Accuracy 0,01° Power: 24v.DC
 Standard video analytics
 IP66 / Working temp.: -35/65°C.
 Military connector

TCID3 Multisensor PT Series



D/N Resolution: 2mp. / 8mp.
 D/N up to 365mm. optical zoom
 Thermal resolution: 640x512 / 1280x1024 Thermal up to
 55mm. (Athermal lenses) Frames/Second: 25/30fps.
 Video compression: H.265, H.264, Mjpeg
 Video output: Digital
 Onvif 2.6, Profile S
 Network: Giga Ethernet
 Laser range finder: 3000m. / 4000m. / 8000m.
 Laser illuminator: 1000m. / 2000m.
 Alarm I/O, RS485
 Pan: 0.1-80°/Sec., Elevation 0.1-40°/Sec.
 Pan: 360°, Elevation -90/90°
 All worm gear drive / Accuracy 0,01°
 Power: 24v.DC
 Standard video analytics
 IP66 / Working temp.: -35/65°C.
 Military connector

THC6/TCIS6 Single sensor PT Series



D/N Resolution: 2mp. / 4mp. / 8mp.
 D/N up to 240mm. optical zoom
 Thermal resolution: 640x512 / 1280x1024 Thermal up to
 55mm. (Athermal lenses) Frames/Second: 25/30fps.
 Video compression: H.265, H.264, Mjpeg Video output:
 Digital
 Onvif 2.6, Profile S
 Network: Giga Ethernet
 Alarm I/O, RS485
 Pan: 0.1-80°/Sec., Elevation 0.1-40°/Sec.
 Pan: 360°, Elevation -90/90°
 All worm gear drive / Accuracy 0,01° Power: 24v.DC
 Standard video analytics
 IP66 / Working temp.: -35/65°C.
 Military connector

* Available with DN or thermal sensor

* **All Compact PT series can be manufactured in aluminum casting or stainless steel**

THCH Day/Night Camera Series



Resolution: 2mp. / 4mp. / 8mp.

Lenses:

6-210mm. EIS/Defogging

6-300mm. EIS/Defogging

6-365mm. OIS/Defogging

6-540mm. EIS/Defogging

15-850mm. OIS/Defogging Frames/Second: 30fps.

Video compression: H.265, H.264, Mjpeg Video output:

Digital, analog optional

Laser illuminator with zoom and collimator: 1000m, 2000m,

Onvif 2.6, Profile S

Network: Giga Ethernet

Alarm I/O, RS485

Pan: 0.01-100°/Sec., Elevation 0.01-80°/Sec.

Pan: 360°, Elevation -90/90°

All worm gear drive / Accuracy 0,1°

Power: 24v.DC

Standard video analytics

IP66 / Working temp.: -35/65°C.

Military connector

THCH Day/Night Camera Series



Advanced analytics powered by:

VIDEOLOGIC ANALYTICS

Resolution: 2mp. / 4mp. / 8mp.

Lenses:

6-210mm. EIS/Defogging

6-300mm. EIS/Defogging

6-365mm. OIS/Defogging

6-540mm. EIS/Defogging

15-850mm. OIS/Defogging Frames/Second: 30fps.

Video compression: H.265, H.264, Mjpeg Video output:

Digital, analog optional

Laser illuminator with zoom and collimator: 1000m, 2000m, 3000m.

Onvif 2.6, Profile S

Network: Giga Ethernet

Alarm I/O, RS485

Pan: 0.01-100°/Sec., Elevation 0,1-80°/Sec.

Pan: 360°, Elevation -90/90°

All worm gear drive / Accuracy 0,1°

Power: 24v.DC

Advanced video analytics

Video tracker

IP66 / Working temp.: -35/65°C.

Military connector

THCB Day/Night Camera Series



Resolution: 2mp. / 4mp. / 8mp.

Lenses:

6-210mm. EIS/Defogging

6-300mm. EIS/Defogging

6-365mm. OIS/Defogging

6-540mm. EIS/Defogging

10-850mm. EIS/Defogging

15-860mm. OIS/Defogging

10,5-920mm. EIS/Defogging 15-1200mm. EIS/Defogging

Frames/Second: 30fps.

Video compression: H.265, H.264, Mjpeg Video output:

Digital, analog optional

Laser illuminator with zoom and collimator: 3000m. / 5000m.

Onvif 2.6, Profile S

Network: Giga Ethernet

Alarm I/O, RS485

Pan: 0,001-100°/Sec., Elevation 0,01-100°/Sec.

Pan: 360°, Elevation -90/90°

All worm gear drive / Accuracy 0,01°

Power: 48v.DC

Standard video analytics

IP66 / Working temp.: -35/65°C.

Military connectors

THCB Day/Night Camera Series



Advanced analytics powered by:

VIDEOLOGIC
ANALYTICS

Resolution: 2mp. / 4mp. / 8mp.

Lenses:

6-210mm. EIS/Defogging

6-300mm. EIS/Defogging

6-365mm. OIS/Defogging

6-540mm. EIS/Defogging

10-850mm. EIS/Defogging

15-860mm. OIS/Defogging

10,5-920mm. EIS/Defogging 15-1200mm. EIS/Defogging

Frames/Second: 30fps.

Video compression: H.265, H.264, Mjpeg Video output:

Digital, analog optional

Laser illuminator with zoom and collimator:

3000m. / 5000m.

Onvif 2.6, Profile S

Network: Giga Ethernet

Alarm I/O, RS485

Pan: 0,001-100°/Sec., Elevation 0,01-100°/Sec.

Pan: 360°, Elevation -90/90°

All worm gear drive / Accuracy 0,01°

Power: 48v.DC

Advanced video analytics

Video tracker

IP66 / Working temp.: -35/65°C.

Military connectors

TCIDH Multisensor PT Camera Series



Resolution: 2mp. / 4mp. / 8mp.

Lenses:

6-210mm. EIS/Defogging

6-300mm. EIS/Defogging

6-365mm. OIS/Defogging

6-540mm. EIS/Defogging

15-850mm. OIS/Defogging

Frames/Second: 30fps.

Video compression: H.265, H.264, Mjpeg Video output:

Digital, analog optional

Sensor type: Vanadium oxide /12um.

Resolution Infrared: 640x512 / 1280x1024 Lenses: 50mm. /

100mm. Athermal/Autofocus Onvif 2.6, Profile S

Network: Giga Ethernet

Alarm I/O, RS485

Pan: 0.01-100°/Sec., Elevation 0.01-80°/Sec.

Pan: 360°, Elevation -90/90°

All worm gear drive / Accuracy 0,1°

Power: 24v.DC

Standard video analytics

IP66 / Working temp.: -35/65°C.

Military connector

Optional GE window

TCIDH Multisensor PT Camera Series



Resolution: 2mp. / 4mp. / 8mp.

Lenses:

6-210mm. EIS/Defogging

6-300mm. EIS/Defogging

6-540mm. EIS/Defogging

Frames/Second: 30fps.

Video compression: H.265, H.264, Mjpeg Video output:

Digital, analog optional

Laser illuminator with zoom and collimator:

1000m. / 2000m.

Sensor type: Vanadium oxide /12um.

Resolution Infrared: 640x512 / 1280x1024 Lenses: 50mm. /

100mm. Athermal/Autofocus Onvif 2.6, Profile S

Network: Giga Ethernet

Alarm I/O, RS485

Pan: 0.01-100°/Sec., Elevation 0,01-80°/Sec.

Pan: 360°, Elevation -90/90°

All worm gear drive / Accuracy 0,1°

Power: 24v.DC

Standard video analytics

IP66 / Working temp.: -35/65°C.

Military connector

Optional GE window

TCIDH Multisensor PT Camera Series



Resolution Day/Night: 2mp. / 4mp. / 8mp.

Lenses:

6-210mm. EIS/Defogging

6-300mm. EIS/Defogging

6-365mm. OIS/Defogging

6-540mm. EIS/Defogging

15-850mm. OIS/Defogging Frames/Second: 30fps.

Video compression: H.265, H.264, Mjpeg Video output:

Digital, analog optional

Sensor type: Vanadium oxide /12um.

Resolution Infrared: 640x512 / 1280x1024 Lenses: 50mm. /

100mm. Athermal/Autofocus Onvif 2.6, Profile S

Network: Giga Ethernet

Alarm I/O, RS485

Pan: 0.01-100°/Sec., Elevation 0.01-80°/Sec.

Pan: 360°, Elevation -90/90°

All worm gear drive / Accuracy 0,1°

Power: 24v.DC

Advanced video analytics

Video tracker

IP66 / Working temp.: -35/65°C.

Military connector

Optional GE window



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ANALYTICS

TCIDH Multisensor PT Camera Series



Advanced analytics powered by:
VIDEOLOGIC ANALYTICS

Resolution: 2mp. / 4mp. / 8mp.
Lenses:
6-210mm. EIS/Defogging
6-300mm. EIS/Defogging
6-540mm. EIS/Defogging
Frames/Second: 30fps.

Video compression: H.265, H.264, Mjpeg Video output:
Digital, analog optional
Laser illuminator with zoom and collimator:
1000m. / 2000m.
Sensor type: Vanadium oxide /12um.
Resolution Infrared: 640x512 / 1280x1024 Lenses: 50mm. /
100mm. Athermal/Autofocus Onvif 2.6, Profile S
Network: Giga Ethernet
Alarm I/O, RS485
Pan: 0.01-100°/Sec., Elevation 0,01-80°/Sec.
Pan: 360°, Elevation -90/90°
All worm gear drive / Accuracy 0,1°
Power: 24v.DC
Advanced video analytics
Video tracker
IP66 / Working temp.: -35/65°C.
Military connector
Optional GE window

TCID8 Thermal Camera Series



Resolution: 2mp. / 4mp. / 8mp.
Lenses:
6-300mm. EIS/Defogging
6-365mm. OIS/Defogging
6-540mm. EIS/Defogging
10-850mm. EIS/Defogging
15-860mm. OIS/Defogging
10,5-920mm. EIS/Defogging 15-1200mm.

EIS/Defogging Frames/Second: 30 or 60fps.
Video compression: H.265, H.264, Mjpeg Video output:
Digital, analog optional
Sensor type: Vanadium oxide /12um.
Resolution Infrared: 640x512 / 1280x1024 Lenses:
30-150mm. /25-225mm.
Continuous zoom, autofocus
Onvif 2.6, Profile S
Network: Giga Ethernet
Alarm I/O, RS485
Pan: 0,01-100°/Sec., Elevation 0,01-100°/Sec.
Pan: 360°, Elevation -90/90°
All worm gear drive / Accuracy 0,01°
Power: 48v.DC
Standard video analytics
IP66 / Working temp.: -35/65°C.
Military connectors

TCID8 Thermal Camera Series



Advanced analytics powered by:
VIDEOLOGIC ANALYTICS

Resolution: 2mp. / 4mp. / 8mp.
Lenses:
6-300mm. EIS/Defogging
6-365mm. OIS/Defogging
6-540mm. EIS/Defogging
10-850mm. EIS/Defogging
15-860mm. OIS/Defogging

10,5-920mm. EIS/Defogging 15-1200mm.
EIS/Defogging Frames/Second: 30fps.
Video compression: H.265, H.264, Mjpeg Video output:
Digital
Sensor type: Vanadium oxide /12um.
Resolution Infrared: 640x512 / 1280x1024 Lenses:
30-150mm. /25-225mm.
Continuous zoom, autofocus
Onvif 2.6, Profile S
Network: Giga Ethernet
Alarm I/O, RS485
Pan: 0,01-100°/Sec., Elevation 0,01-100°/Sec.
Pan: 360°, Elevation -90/90°
All worm gear drive / Accuracy 0,01°
Power: 48v.DC
Advanced video analytics
Video tracker
IP66 / Working temp.: -35/65°C.
Military connectors

TCID8 Thermal Camera Series



Resolution: 2mp. / 4mp. / 8mp.
 Lenses:
 6-540mm. EIS/Defogging
 10-850mm. EIS/Defogging
 15-860mm. OIS/Defogging
 10,5-920mm. EIS/Defogging 15-1200mm. EIS/Defogging
 Frames/Second: 30 or 60fps.

Video compression: H.265, H.264, Mjpeg Video output:
 Digital, analog optional Laser range finder: 6Km. / 10Km. / 15Km.
 Sensor type: Vanadium oxide /12um.
 Resolution Infrared: 640x512 / 1280x1024 Lenses:
 30-150mm. /25-225mm.
 Continuous zoom, autofocus GPS
 Onvif 2.6, Profile S
 Network: Giga Ethernet
 Alarm I/O, RS485
 Pan: 0,01-100°/Sec., Elevation 0,01-100°/Sec.
 Pan: 360°, Elevation -90/90°
 All worm gear drive / Accuracy 0,01°
 Power: 48v.DC
 Standard video analytics
 IP66 / Working temp.: -35/65°C.
 Military connectors

TCIDH Multisensor PT Camera Series



Advanced analytics powered by:
VIDEOLOGIC
 ANALYTICS

Resolution: 2mp. / 4mp. / 8mp.
 Lenses:
 6-540mm. EIS/Defogging
 10-850mm. EIS/Defogging
 15-860mm. OIS/Defogging
 10,5-920mm. EIS/Defogging 15-1200mm. EIS/Defogging
 Frames/Second: 30fps.
 Video compression: H.265, H.264, Mjpeg

Video output: Digital
 Laser range finder: 6Km. / 10Km. / 15Km.
 Sensor type: Vanadium oxide /12um.
 Resolution Infrared: 640x512 / 1280x1024 Lenses:
 30-150mm. /25-225mm.
 Continuous zoom, autofocus GPS
 Onvif 2.6, Profile S
 Network: Giga Ethernet
 Alarm I/O, RS485
 Pan: 0,01-100°/Sec., Elevation 0,01-100°/Sec.
 Pan: 360°, Elevation -90/90°
 All worm gear drive / Accuracy 0,01°
 Power: 48v.DC
 Advanced video analytics, Video tracker
 IP66 / Working temp.: -35/65°C.
 Military connectors

TCID9 Thermal Camera Series



Resolution: 2mp. / 4mp. / 8mp.
 Lenses:
 6-540mm. EIS/Defogging
 10-850mm. EIS/Defogging
 15-860mm. OIS/Defogging
 10,5-920mm. EIS/Defogging 15-1200mm.
 EIS/Defogging 12.5-1000mm. EIS/Defogging 25-2000mm.

EIS/Defogging Frames/Second: 30 - 60 - 120fps.
 Video compression: H.265, H.264, Mjpeg Video output:
 Digital, analog optional
 Sensor type: Vanadium oxide /12um.
 Resolution Infrared: 640x512 / 1280x1024 Lenses:
 37.5-300mm. / 50-350mm.
 Continuous zoom, autofocus
 Onvif 2.6, Profile S
 Network: Giga Ethernet GNSS/LRF/DMC
 Absolute optical encoders
 Alarm I/O, RS485
 Pan: 0,001-100°/Sec., Elevation 0,01-100°/Sec.
 Pan: 360°, Elevation -90/90°
 All worm gear drive / Accuracy 0,01°
 Power: 48v.DC
 Standard video analytics
 IP66 / Working temp.: -35/65°C.
 Military connectors

TCID9 Thermal Camera Series



Resolution: 2mp. / 4mp. / 8mp.
Lenses:
6-540mm. EIS/Defogging
10-850mm. EIS/Defogging
15-860mm. OIS/Defogging
10,5-920mm. EIS/Defogging 15-1200mm.
EIS/Defogging 12.5-1000mm. EIS/Defogging 25-2000mm.

EIS/Defogging Frames/Second: 30 - 60 - 120fps.
Video compression: H.265, H.264, Mjpeg Video output:
Digital
Sensor type: Vanadium oxide /12um.
Resolution Infrared: 640x512 / 1280x1024 Lenses:
37.5-300mm. / 50-350mm.
Continuous zoom, autofocus
Onvif 2.6, Profile S
Network: Giga Ethernet GNSS/LRF/DMC
Absolute optical encoders
Alarm I/O, RS485
Pan: 0,001-100°/Sec., Elevation 0,01-100°/Sec.
Pan: 360°, Elevation -90/90°
All worm gear drive / Accuracy 0,01°
Power: 48v.DC
Advanced video analytics
Video tracker
IP66 / Working temp.: -35/65°C.
Military connectors

TCID9 Thermal Camera Series



Resolution: 2mp. / 4mp. / 8mp.
Lenses:
6-540mm. EIS/Defogging
10-850mm. EIS/Defogging
15-860mm. OIS/Defogging
10,5-920mm. EIS/Defogging 15-1200mm. EIS/Defogging
12.5-1000mm. EIS/Defogging 25-2000mm. EIS/Defogging

Frames/Second: 30 - 60 - 120fps.
Video compression: H.265, H.264, Mjpeg Video output:
Digital, analog optional
Sensor type: Vanadium oxide /12um.
Resolution Infrared: 640x512 / 1280x1024 Lenses:
37.5-300mm. / 50-350mm.
Continuous zoom, autofocus GNSS/LRF/DMC
Absolute optical encoders
Onvif 2.6, Profile S
Network: Giga Ethernet
Alarm I/O, RS485
Pan: 0,001-100°/Sec., Elevation 0,01-100°/Sec.
Pan: 360°, Elevation -90/90°
All worm gear drive / Accuracy 0,01°
Power: 48v.DC
Standard video analytics
IP66 / Working temp.: -35/65°C.
Military connectors

TCID9 Thermal Camera Series



Resolution: 2mp. / 4mp. / 8mp.
Lenses:
6-540mm. EIS/Defogging
10-850mm. EIS/Defogging
15-860mm. OIS/Defogging
10,5-920mm. EIS/Defogging 15-1200mm. EIS/Defogging
12.5-1000mm. EIS/Defogging

25-2000mm. EIS/Defogging Frames/Second: 30 - 60 - 120fps.
Video compression: H.265, H.264, Mjpeg Video output:
Digital
Sensor type: Vanadium oxide /12um.
Resolution Infrared: 640x512 / 1280x1024 Lenses:
37.5-300mm. / 50-350mm.
Continuous zoom, autofocus GNSS/LRF/DMC
Absolute optical encoders
Onvif 2.6, Profile S
Network: Giga Ethernet
Alarm I/O, RS485
Pan: 0,001-100°/Sec., Elevation 0,01-100°/Sec.
Pan: 360°, Elevation -90/90°
All worm gear drive / Accuracy 0,01°
Power: 48v.DC
Advanced video analytics, Video tracker
IP66 / Working temp.: -35/65°C.
Military connectors

TCIS57 Thermal Camera Series



Sensor type: MCT (HgCdTe) Resolution/Pixel: 640x512 / 15um.
Wave length: 3,7-4,8um.
Sensitivity: $\leq 25\text{mK}$.
Lens: 20-300mm. / f.4
Zoom factor: 15X optical + 8X digital HFOV: 26,9°-1,8°

Frames/Second: 25/30fps. (digital)
Video compression: H.265/H.264, Mjpeg Video output:
Digital, Analog optional MTBF Cooler: 20.000h. / 20°C.
Cooling time: 7min.
Image processing / Image enhancement Digital video stabilization
Continuous zoom and focus
Autofocus lens
Multiple streams
Built in advanced analytics
Onvif 2.5, Profile S
Network: 10/100 Ethernet
Pan/Tilt: Different options available RS485, Pelco D
Power: 24v.DC
IP66 / Working temp.: -35/65°C.
Military connector

TCIS57 Thermal Camera Series



Sensor type: MCT (HgCdTe) Resolution/Pixel: 640x512 / 15um.
Wave length: 3,7-4,8um.
Sensitivity: $\leq 25\text{mK}$.
Lens: 90-900mm. / f.4
Zoom factor: 10X optical + 8X digital HFOV: 6,1°-0,4°

Frames/Second: 25/30fps. (digital)
Video compression: H.265/H.264, Mjpeg Video output:
Digital, Analog optional MTBF Cooler: 20.000h. / 20°C.
Cooling time: 7min.
Image processing / Image enhancement Digital video stabilization
Continuous zoom and focus
Autofocus lens
Multiple streams
Built in advanced analytics
Onvif 2.6, Profile S
Network: 10/100 Ethernet
Pan/Tilt: Different options available RS485, Pelco D
Power: 24v.DC
IP66 / Working temp.: -35/65°C.
Military connector

TCIS57 Thermal Camera Series



Sensor type: MCT (HgCdTe) Resolution/Pixel: 640x512 / 15um.
Wave length: 3,7-4,8um.
Sensitivity: $\leq 25\text{mK}$.
Lens: 65-650mm. / f.4
Zoom factor: 10X optical + 8X digital HFOV: 8,4°-0,85°

Frames/Second: 25/30fps. (digital)
Video compression: H.265/H.264, Mjpeg Video output:
Digital, Analog optional MTBF Cooler: 20.000h. / 20°C.
Cooling time: 7min.
Image processing / Image enhancement Digital video stabilization
Continuous zoom and focus
Autofocus lens
Multiple streams
Built in advanced analytics
Onvif 2.6, Profile S
Network: 10/100 Ethernet
Pan/Tilt: Different options available RS485, Pelco D
Power: 24v.DC
IP66 / Working temp.: -35/65°C.
Military connector

TCIS57 Thermal Camera Series



Sensor type: MCT (HgCdTe) Resolution/Pixel: 640x512 / 15um.
Wave length: 3,7-4,8um.
Sensitivity: ≤25mK.
Lens: 20-300mm. / f.5,5
Zoom factor: 15X optical + 8X digital HFOV: 29,8°-1,3°

Frames/Second: 25/30fps. (digital)
Video compression: H.265/H.264, Mjpeg Video output:
Digital, Analogue optional MTBF Cooler: 15.000h. / 20°C.
Cooling time: 7min.
Image processing / Image enhancement Digital video stabilization
Continuous zoom and focus
Autofocus lens
Multiple streams
Built in advanced analytics
Onvif 2.5, Profile S
Network: 10/100 Ethernet
Pan/Tilt: Different options available RS485, Pelco D
Power: 24v.DC
IP66 / Working temp.: -35/65°C.
Military connector

TCIS57 Thermal Camera Series



Sensor type: MCT (HgCdTe) Resolution/Pixel: 640x512 / 15um.
Wave length: 3,7-4,8um.
Sensitivity: ≤25mK.
Lens: 90-900mm. / f.5,5
Zoom factor: 10X optical + 8X digital HFOV: 18,2°-0,9°

Frames/Second: 25/30fps. (digital)
Video compression: H.265/H.264, Mjpeg Video output:
Digital, Analogue optional MTBF Cooler: 15.000h. / 20°C.
Cooling time: 7min.
Image processing / Image enhancement Digital video stabilization
Continuous zoom and focus
Autofocus lens
Multiple streams
Built in advanced analytics
Onvif 2.5, Profile S
Network: 10/100 Ethernet
Pan/Tilt: Different options available RS485, Pelco D
Power: 24v.DC
IP66 / Working temp.: -35/65°C.
Military connector

TCIS57 Thermal Camera Series



Sensor type: MCT (HgCdTe) Resolution/Pixel: 640x512 / 15um.
Wave length: 3,7-4,8um.
Sensitivity: ≤25mK.
Lens: 65-650mm. / f.5,5
Zoom factor: 10X optical + 8X digital HFOV: 15,2°-0,57°

Frames/Second: 25/30fps. (digital)
Video compression: H.265/H.264, Mjpeg Video output:
Digital, Analogue optional MTBF Cooler: 15.000h. / 20°C.
Cooling time: 7min.
Image processing / Image enhancement Digital video stabilization
Continuous zoom and focus
Autofocus lens
Multiple streams
Built in advanced analytics
Onvif 2.5, Profile S
Network: 10/100 Ethernet
Pan/Tilt: Different options available RS485, Pelco D
Power: 24v.DC
IP66 / Working temp.: -35/65°C.
Military connector

THC1 Day/Night Camera Series



Sensor type: Ultra low light CMOS sensor Resolution/Pixel:
1920x1080/2.9um.
Lens: 10-500mm. / f. 4.5
Min. Illumination: 0.006 Lux
Zoom factor: 50X
HFOV: 34.8°-0.74°
Frames/Second: Up to 120fps.

Video compression: H.265/H.264, Mjpeg Video output:
Digital
Continuous zoom and focus
Autofocus lens
Multiple streams
Near infrared video / Optical defogging Advanced electronic
video stabilization Advanced network security
Artificial intelligence / Image enhancement Built in
advanced analytics
Onvif 2.6, Profile S, G, T, M
TFC Technology for high temp. installations Network: Giga
Ethernet
Pan/Tilt: Different options available
RS485, Pelco D
Power: 12v.DC
IP66 / Working temp.: -35/65°C.
Military connector

TCIS57 Thermal Camera Series



Sensor type: Ultra low light CMOS sensor Resolution/Pixel:
1920x1080/2.9um.
Lens: 21-750mm. / f. 3.5
Min. Illumination: 0.006 Lux
Zoom factor: 35X
HFOV: 22°-0.4°
Frames/Second: Up to 120fps.

Video compression: H.265/H.264, Mjpeg Video output:
Digital
Continuous zoom and focus
Autofocus lens
Multiple streams
Near infrared video / Optical defogging Advanced electronic
video stabilization Advanced network security
Artificial intelligence / Image enhancement Built in
advanced analytics
Onvif 2.6, Profile S, G, T, M
TFC Technology for high temp. installations Network: Giga
Ethernet
Pan/Tilt: Different options available
RS485, Pelco D
Power: 12v.DC
IP66 / Working temp.: -35/65°C.
Military connector

TCIS57 Thermal Camera Series



Sensor type: Ultra low light CMOS sensor Resolution/Pixel:
1920x1080/2.9um.
Lens: 12.5-1000mm. / f. 3.5
Min. Illumination: 0.006 Lux
Zoom factor: 80X
HFOV: 18°-0.37°
Frames/Second: Up to 120fps.

Video compression: H.265/H.264, Mjpeg Video output:
Digital
Continuous zoom and focus
Autofocus lens
Multiple streams
Near infrared video / Optical defogging Advanced electronic
video stabilization Advanced network security
Artificial intelligence / Image enhancement Built in
advanced analytics
Onvif 2.6, Profile S, G, T, M
TFC Technology for high temp. installations Network: Giga
Ethernet
Pan/Tilt: Different options available
RS485, Pelco D
Power: 12v.DC
IP66 / Working temp.: -35/65°C.
Military connector

THC1 Day/Night Camera Series



Sensor type: Ultra low light CMOS sensor Resolution/Pixel:
1920x1080/2.9um.
Lens: 25-2000mm. / f. 7
Min. Illumination: 0.006 Lux
Zoom factor: 80X
HFOV: 15.1°-0.18°
Frames/Second: Up to 120fps.

Video compression: H.265/H.264, Mjpeg Video output:
Digital
Continuous zoom and focus
Autofocus lens
Multiple streams
Near infrared video / Optical defogging Advanced electronic
video stabilization Advanced network security
Artificial intelligence / Image enhancement Built in
advanced analytics
Onvif 2.6, Profile S, G, T, M
TFC Technology for high temp. installations Network: Giga
Ethernet
Pan/Tilt: Different options available
RS485, Pelco D
Power: 12v.DC
IP66 / Working temp.: -35/65°C.
Military connector

THCMx1 Short Wave Camera Series



Resolution: 1280x1024
Sensor type: In1/2" InGaAs Global Shutter SWIR Wavelength:
900~1700nm.
Pixel pitch: 5um.
Frames/Second: 50/60fps.
Video compression: H.265, H.264, Mjpeg
Video output: Digital+LVDS
Lens: 16,6-500mm.
Zoom/Autofocus lens Onvif 2.6, Profile S Network: 10/100
Ethernet Alarm I/O, RS485
Power: DC
Standard video analytics IP66 waterproof
Working temp.: -35/65°C.
Military connector

THCMx0 Short Wave Camera Series



Resolution: 640x512
Sensor type: In1/2" InGaAs Global Shutter SWIR Wavelength:
900~1700nm.
Pixel pitch: 5um.
Frames/Second: 50/60fps.
Video compression: H.265, H.264, Mjpeg
Video output: Digital+LVDS
Lens: 16,6-500mm.
Zoom/Autofocus lens Onvif 2.6, Profile S Network: 10/100
Ethernet Alarm I/O, RS485
Power: DC
Standard video analytics IP66 waterproof
Working temp.: -35/65°C.
Military connector

TPD1 positioning system



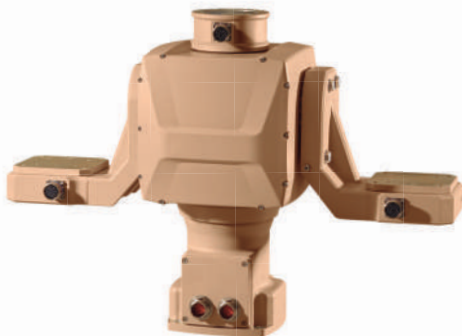
Load capacity: 10Kg.
 Material: Aluminum Waterproof: IP66
 Pan range: 360° endless
 Pan axis speed: 0,05° - 50°/Sec.
 Tilt axis range: -25°/25°
 Tilt axis speed: 0,05°-25°/Sec.
 Accuracy: $\leq \pm 1$ mrad.
 Dynamic brake
 Ethernet or RS422 control
 2x HDSDI or 2x H.264 GPS/DMC receiver, optional

TPD2 positioning system



Load capacity: 2X 18Kg.
 Material: Aluminum Waterproof: IP66
 Pan range: 360° endless
 Pan axis speed: 0,03° - 70°/Sec.
 Tilt axis range: -35°/35°
 Tilt axis speed: 0,03°-30°/Sec.
 Accuracy: $\pm 0,5$ mrad
 Ethernet or RS422 control
 2x HDSDI or 2x H.264 GPS,LRF,DMC, marine version
 1000Base-T options

TPD3 Stabilized positioning system



Load capacity: 2x25kg. +70Kg.*
 Material: Aluminum
 Waterproof: IP66
 Pan range: 360° endless
 Pan axis speed: 0,03° - 60°/Sec.
 Tilt axis range: -60°/60° or -90°/90°
 Tilt axis speed: 0,03°-60°/Sec.
 Accuracy: 0,002°
 Dynamic brake
 Stabilization optional
 2xHDSDI or 2xH.264 / 5x serial lines Ethernet control
 GPS,LRF,DMC, marine version optional Integrated Ethernet router, optional
 * Optional Load capacity 2x40Kg.+70Kg.

TPD4 Stabilized positioning system



Load capacity: 30Kg.
 Material: Aluminum
 Waterproof: IP67
 Pan range: 360° endless
 Pan axis speed: 0,01° - 60°/Sec.
 Tilt axis range: -90°/90°**
 Tilt axis speed: 0,01°-60°/Sec.
 Accuracy: $\leq \pm 1$ mrad.
 No backlash
 Dynamic brake
 Stabilization optional
 RS422 control, Ethernet optional GPS,LRF,DMC, marine version optional * Customizable arm length
 ** Depending in payload length

TPD5 positioning system



Load capacity: 2x20Kg. + 18Kg.
 Material: Aluminum
 Waterproof: IP66
 Pan range: 360° endless
 Pan axis speed: 0,03° - 120°/Sec.
 Tilt axis range: -40°/40°
 Tilt axis speed: 0,03°-100°/Sec.
 Accuracy: $\leq \pm 0.2$ mrad
 2xHDSDI or 2xH.264 / 5x serial lines No backlash
 Dynamic brake
 Ethernet control
 1000BASE-T optional

TPD6 positioning system



Load capacity: 2x20Kg.+10Kg.
 Material: Aluminum
 Waterproof: IP66
 Pan range: 360° endless
 Pan axis speed: 0,03° - 120°/Sec.
 Tilt axis range: -90°/40°
 Tilt axis speed: 0,03°-100°/Sec.
 Accuracy: $\leq \pm 0.25$ mrad
 2xHDSDI or 2xH.264 / 5x serial lines
 No Backlash
 Self lock brake
 Stabilization optional
 Ethernet or RS-422/485, Pelco D control 1000BASE-T, marine optional

TPD7 Stabilized positioning system



Load capacity: 80Kg.
 Material: Aluminum
 Waterproof: IP66
 Pan range: 360° endless
 Pan axis speed: 0,03° - 100°/Sec.
 Tilt axis range: $\pm 45^\circ$
 Tilt axis speed: 0,03°-100°/Sec.
 Accuracy: $\leq \pm 0.2$ mrad
 2xHDSDI or 2xH.264 / 5x serial lines
 No backlash
 Cleaning/drying system
 Ethernet control
 Stabilization optional
 2x1000BASE-T, marine version optional

Advanced Video Tracker

Advanced analytics powered by:



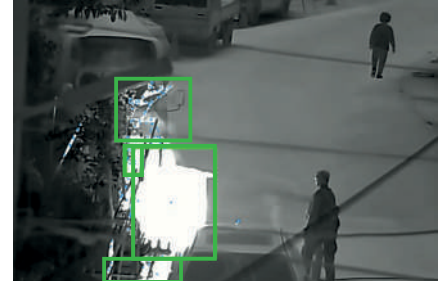
VIDEOLOGIC
ANALYTICS



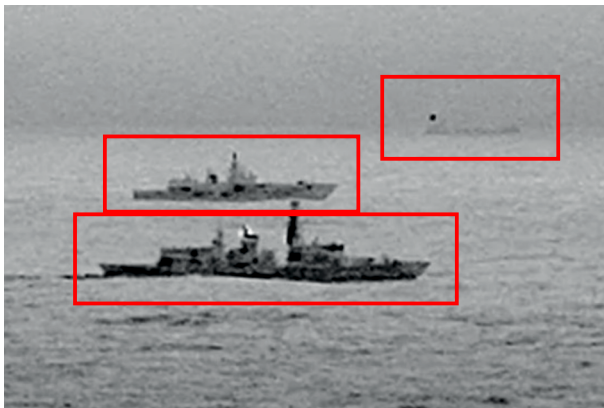
Advanced Thermal Video Analytics
Advanced Day/Night Video Analytics
Wild Fire Detection
Artificial Intelligence Object Classification

Tanz Security in cooperation with Videologic company have developed the most advanced and accurate video analytics.

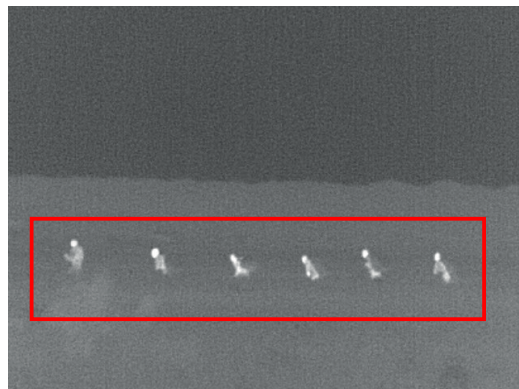
Video analytics specially designed for infrared sensors and with the best performance to avoid false alarms and embedded in the infrared cameras, sending alarms through Onvif protocol.



Draw virtual lines and perimeters polygons to detect and classify persons, vehicles or other objects, select object dimensions to trigger or cancel an alarm. Specially designed analytics to avoid alarms caused by crossing animals or any other unwanted items.



Virtual perimeters
Border line crossing
Loitering
Human/Vehicle classification



Homeland Border Control
Virtual Perimeter Security In Critical Infrastructures
Perimeter Security in Military Facilities and Depots Hangars

Video Tracker



Midrange compact surveillance radar



Type: Wideband coherent Doppler CWLFM
 Low probability interception LPI
 Frequency band: Ku
 Bandwidth: 1Ghz.
 ±5° elevation control
 Instrumental detection range: 5Km.
 Coverage area: 78Km²
 360° Azimuth coverage
 Target: Personnel and vehicles, static or moving 4500m.
 detection range for human
 5000m. detection range for light vehicle
 Scan rate: 60 rpm. configurable
 Range resolution 0,2-1m. configurable
 Range accuracy: 0,05-0,25m.
 Gigabit Ethernet, remote operation and management

Midrange CS&VTS coastal surveillance radar



Type: Wideband coherent Doppler CWLFM
 Low probability interception LPI
 Frequency band: Ku
 Bandwidth: 1Ghz.
 ±5° elevation control
 Instrumental detection range: 6 or 12NM.
 360° Azimuth coverage
 2 nautical miles detection range (RCS:0,5m²)
 5 nautical miles detection range (RCS:0,5m²)
 Scan rate: 60 rpm. configurable
 Range resolution 0,2-1m. configurable
 Range accuracy: 0,05-0,25m.
 Vessel Traffic Services (VTS)
 Inland waterway surveillance
 Gigabit Ethernet, remote operation and management

* Available UAS detection model

Long range coastal surveillance radar



Type: Wideband coherent Doppler CWLFM
 Low probability interception LPI
 Frequency band: X band (8.5 - 9.5 GHz)
 Bandwidth: 1Ghz. 5 W / 25W / 50W transmitted power
 Track before declare, Built-in tracker
 Instrumental detection range: 90, 40 or 30Km. / 48, 24 or 18 Nm.
 360° Azimuth coverage
 Azimuth resolution 1,2°
 Azimuth accuracy <0,1°
 RHIB detection range >20Km.
 Scan rate: 30 rpm. configurable
 Range resolution 1-3m. configurable
 Range accuracy: 0,25-0,75m.

Long range ground surveillance radar



Type: Wideband coherent Doppler LFM
 Low probability interception LPI
 Frequency band: X band
 Bandwidth: 1Ghz. 5 W / 25W / 50W transmitted power
 Track before declare, Built-in tracker
 Instrumental detection range: 20000 meter / 45000 meter
 Detection Range (Pedestrian): 10Km.
 Detection Range (Light vehicle): 20Km.
 360° Azimuth coverage
 Scan rate: 30 rpm. configurable
 Range resolution 1-3m. configurable
 Range accuracy: 0,25-0,75m.

Long Range Directional Surveillance Radar



Type: Simultaneous multi-beam digital array radar
 Wideband coherent Doppler Continuous Wave
 Linear Frequency Modulated (CWLFM)
 Low Probability of Interception (LPI)
 Frequency band: X band
 Bandwidth: Up to 500Mhz.
 Transmitting power: 4W., optional 25W.
 Processing: Adaptive clutter map Electronic protection
 Track-before-declare, Multi-target tracker
 Simultaneous multi-beam no scan radar
 Instrumental detection range: 48 km or 20 km
 90°-360° Azimuth coverage
 Detection: Micro UAS: 4.5 km (RCS = 0.01 m2)
 Walking person: 12 km
 Light vehicle: 25 km
 Heavy vehicle: 33 km
 Azimuth accuracy: <0,5°
 Speed resolution 0,1-0,3Km/h. configurable
 Range accuracy: 0,08-0,8m.

HMI Radar And GIS Control Platform



Radar control platform to manage all radars.
 Integrated with all optronics.
 Integrated with military jammer.
 Outstanding situational awareness & reaction capability
 Third party device/sensor integration (NMEA0183, PELCO-D...) Automatic slew-to-cue of pan & tilt camera systems.

User definable areas / virtual fences with associated custom behaviors
 Advanced Artificial Intelligence y object classification.
 Multi-sensor data fusion.
 Runs on conventional desktop or laptop Pcs.
 Integrated high performance Geographic Information System (GIS) Modular and scalable architecture.

Military Drone Jammer



Up to 18 bands directional high power jammer GPS, SBAS, QZSS, GLONASS, BEIDOU, Galileo
 50 or 100 Watt power
 Bands:
 430 - 440 MHz. 459 - 461 MHz.
 868 - 870 MHz. 902 - 928 MHz.
 2400 - 2490 MHz.
 5700 - 6000 MHz.
 Mounted in positioning system
 Wide working temperature range
 Independent control or wavebands
 Flexible protocol activation

M Series Stationary Drone Jammer



Plug-and-forget jammer
 360° drone protection
 100% autonomous jamming, not supervision required
 Several bands to select
 GPS, WIFI, QZSS, GLONASS, BEIDOU, Galileo blocking Up to 1500 Watt power
 Up to 4.5Km jamming distance
 Fiber glass body, ready to work in harsh environments Wide working temperature range
 Excellent heat dissipation
 High gain antennas
 Power up in seconds

1Km. Laser Light Illuminator With Collimator



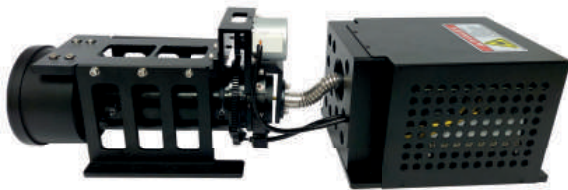
Type: EEL
Distance: $\geq 1000\text{m}$.
Wavelength: $808 \pm 10\text{nm}$.
Output power: 8W.
Zoom HFOV: $0,3-30^\circ$
Collimator lens
Spot diameter at max. distance: 28m.
Over 30.000 hours life

2Km. Laser Light Illuminator With Collimator



Type: Fiber Coupling
Distance: $\geq 2000\text{m}$.
Wavelength: $808 \pm 10\text{nm}$.
Output power: 13W.
Zoom HFOV: $0,8-72^\circ$
Collimator lens
Spot diameter at max. distance: 21m.
Over 30.000 hours life

3Km. Laser Light Illuminator With Collimator



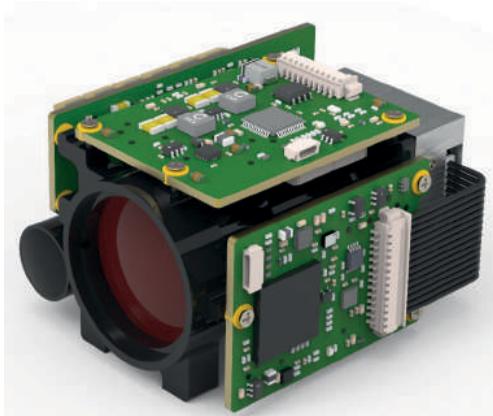
Type: Fiber Coupling
Distance: $\geq 3000\text{m}$.
Wavelength: $808 \pm 10\text{nm}$.
Output power: 18W.
Zoom HFOV: $0,3-50^\circ$
Collimator lens
Spot diameter at max. distance: 16m.
Over 20.000 hours life

5Km. Laser Light Illuminator With Collimator



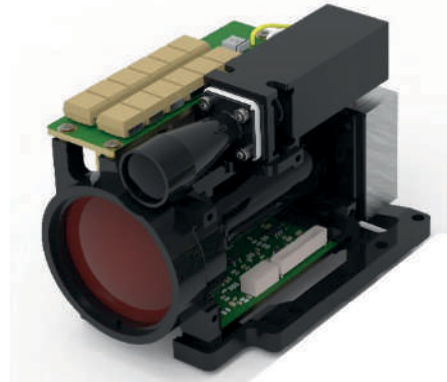
Type: Fiber Coupling
Distance: $\geq 5000\text{m}$.
Wavelength: $808 \pm 10\text{nm}$.
Output power: 20W.
Zoom HFOV: $0,3-50^\circ$
Collimator lens
Spot diameter at max. distance: 16m.
Over 20.000 hours life

4Km. Laser Range Finder



Max. NATO detection distance: 4Km.
Instrumental visual: 8Km.
Ranging accuracy: 1m.
Wave length: $1535 \pm 5\text{nm}$.
Detection rate: 98%
Multiple target detection: ≥ 3 Ranging Frequency: 1-10Hz.
Divergence: $\leq 0,45\text{mrad}$ Eye-Safe/Class 1/1M

6Km. Laser Range Finder



Max. NATO detection distance: 6Km.
Instrumental visual: 10Km.
Ranging accuracy: 1m.*
Wave length: $1535 \pm 5\text{nm}$.
Detection rate: 98%
Multiple target detection: ≥ 3 Ranging Frequency: 1-10Hz.
Divergence: $\leq 0,45\text{mrad}$ Eye-Safe/Class 1/1M

10Km. Laser Range Finder



Max. NATO detection distance: 10Km.
Instrumental visual: 15Km.
Ranging accuracy: 1m.*
Wave length: $1535 \pm 5\text{nm}$.
Detection rate: 98%
Multiple target detection: ≥ 3
Ranging Frequency: 1-10Hz.
Divergence: $\leq 0,45\text{mrad}$ Eye-Safe/Class 1/1M

15Km. Laser Range Finder



Max. NATO detection distance: 15Km.
Instrumental visual: 20Km.
Ranging accuracy: 1m.*
Wave length: $1535 \pm 5\text{nm}$.
Detection rate: 98%
Multiple target detection: ≥ 3
Ranging Frequency: 1-10Hz.
Divergence: $\leq 0,45\text{mrad}$ Eye-Safe/Class 1/1M

HELIOS C2 Advanced surveillance



- Multisensor pan/tilt control
- LWIR/MWIR/SWIR/Day-Night management
- GNSS/DMC/AIS/LRF/UGS data input
- Geo maps for situational awareness
- Virtual security areas/perimeters
- PIP video
- Video autotracker, automatic or manual
- Slew-to-cue tracking capability
- AI analytics (Human, vehicles, drones, vessels ...)
- Video analytics
- Distant target geo-position calculation
- Panoramic view for situational awareness
- System connection tree
- Detection/alerts/analitics data base reports
- Multi-screen /TV wall support
- Client/Server architecture

Radar plot extension



Tactical extension

AIS and nautical chart extension



Geo-referenced video extension

Typical Architecture

