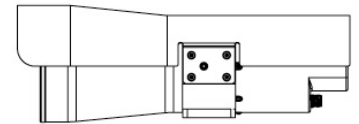


MWIR Short Range 18x Zoom Thermal Camera



Side View



Rear View

The Short Range Continuous Zoom Thermal Camera

is the system of choice for all-weather security and surveillance. With outstanding target detection and recognition capabilities, the Short Range combines high-end performance with reliability and ease of use.

The Short Range delivers in day or night an extraordinarily clear thermal video with the convenience of a G5 designed and built continuous zoom infrared lens. Its horizontal field of view zooms smoothly from 32° to 1.8°. It enables man-sized target detection at ranges in excess of 10km in good conditions. The Short Range integrates advanced cooled detector technology has a 640 x 512 focal plane array that operates in the 3–5µm MWIR spectral region — the best choice for marine and high humidity environments. Environmentally sealed, dry nitrogen backfilled enclosure ensures operability and stability over variable temperatures and diverse weather conditions. The Short Range camera is remotely controllable via serial interface and Graphical User Interface.

Applications: Vessel Traffic Surveillance, Border Protection, Critical Infrastructure Protection, Airport and Port Security

Short Range Thermal Imaging Camera Featuring:

- 18X Continuous Optical Zoom
- Auto Focus
- *f/4* High Sensitivity Zoom Lens
- Cooled 3–5µm MWIR Detector
- 640 x 512 pixels Focal Plane Array
- Multiple Command Protocols
- 2 Year Warranty
- Environmentally Sealed IP67
- G5 Image Processing
- Edge Enhancement
- SD SDI Digital Video Output



* Range Performance

- D = Detection** 50% Probability D / R / I
 - R = Recognition** Target 2 degree delta T vs background
 - I = Identification** Clear atmosphere / very low turbulence
- Actual range performance will vary based on a number of conditions, including user experience, display size/quality, weather/atmospheric conditions, etc.

Range in Kilometers

2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	

- = Target Size (1.8x0.5m)
- = Target Size (2.3x2.3m)

MWIR Short Range 18x Thermal Camera

Part	200070
Video	PAL/NTSC/Digital Video Optional
Control	Control and command available via an RS-232/422 serial interface and PC Graphical User Interface
Power	6-32 VDC/ 20 Watts typical @ 25°C
Environmental	Unit sealed and dry nitrogen backfilled, rated IP67 Front Element Defroster Operating Temperature Range: -32°C to +65°C Meets MIL STD 810F
Mount	1/4-20 Tripod Interface 3/8-16 Tripod Interface
Weight	11.8 lbs (5.35 kg)
Length	15.3 in (39.05 cm)

Cooled Sensor

Detector	640 x 512
Spectral Band	3–5µm
Warranty	2 -Years

Zoom Lens

Spectral Range	3–5µm
Lens Type	<i>f/4</i> 18x Continuous Zoom
Lens Features	Motorized remote operation Auto and manual focus adjust

Field of View	NFOV- 1.8° x 1.4° WFOV- 32° x 24°
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MWIR Mid-Range 18X Zoom Thermal Camera



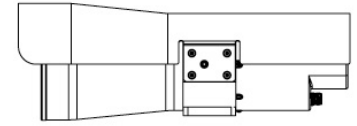
The 18X Zoom Thermal Camera

is the system of choice for long range all-weather security and surveillance. With outstanding very long range target detection and recognition capabilities, the Mid Range combines high-end performance with G5IR reliability and ease of use. The Mid Range delivers in all conditions day or night or bad weather extraordinarily clear long range thermal video images with the convenience of continuous zoom. Its horizontal field of view zooms smoothly from 18° to 1.0°. It enables man-sized target detection at ranges in excess of 18km in good conditions. The Mid-Range integrates advanced cooled photodetector technology has a 640 x 512 focal plane array that operates in the 3–5µm MWIR spectral region — the best choice for marine and high humidity environments. The G5IR's environmentally sealed, dry nitrogen backfilled enclosure ensures operability and stability over variable temperatures and diverse weather conditions. The Mid Range imager is remotely controllable via serial interface and intuitive Graphical User Interface.

Applications: Vessel Traffic Surveillance, Border Protection, Critical Infrastructure Protection, Airport and Port Security

*Range Performance

- D = Detection** 50% Probability D / R / I
- R = Recognition** Target 2 degree delta T vs background
- I = Identification** Clear atmosphere / very low turbulence
Actual range performance will vary based on a number of conditions, including user experience, display size/quality, weather/atmospheric conditions, etc.



Side View



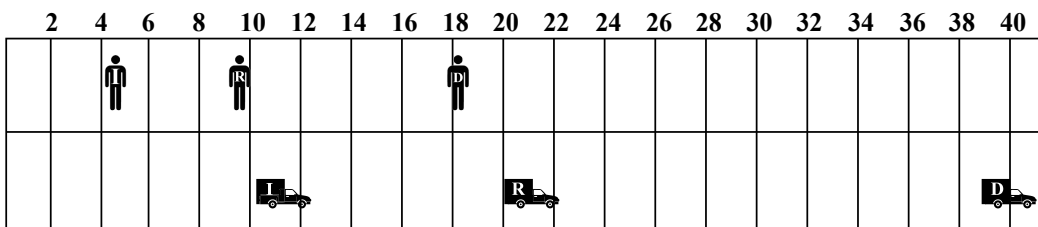
Rear View



Mid- Range Thermal Imaging Camera

Featuring:

- 18X Continuous Optical Zoom
- Auto Focus
- f/4 High Sensitivity Zoom Lens
- Cooled 3-5µ MWIR Detector
- 640 x 512 pixels Focal Plane Array
- Multiple Command Protocols
- 2-Year Warranty
- Environmentally Sealed IP67
- G5 Image Processing
- Edge Enhancement
- SD SDI Digital Video Output

Range in Kilometers



-  = Target Size (1.8x0.5m)
-  = Target Size (2.3x2.3m)

MWIR Mid-Range 18x Thermal Camera

Part	200102
Video	PAL/NTSC/Digital Video Optional
Control	Control and command available via an RS-232/422 serial interface and PC Graphical User Interface
Power	6-32 VDC/ 20 Watts typical @ 25°C
Environmental	Unit sealed and dry nitrogen backfilled, rated IP67 Front Element Defroster Operating Temperature Range: -32°C to +65°C Meets MIL STD 810F
Mount	1/4-20 Tripod Interface 3/8-16 Tripod Interface
Weight	13.5 lbs (6.12 kg)
Length	18.8 in (47.94 cm)

Cooled Sensor

Detector	640 x 512
Spectral Band	3–5µm
Warranty	2-Years

Zoom Lens

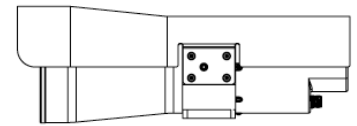
Spectral Range	3–5µm
Lens Type	f/4 18x Continuous Zoom
Lens Features	Motorized remote operation Auto and manual focus adjust

Field of View

NFOV-	1.0° x 0.75°
WFOV-	18.0° x 13.7°

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MWIR Long Range - SD 18X Zoom Thermal Camera



Side View



Rear View

The LR- SD Continuous Zoom

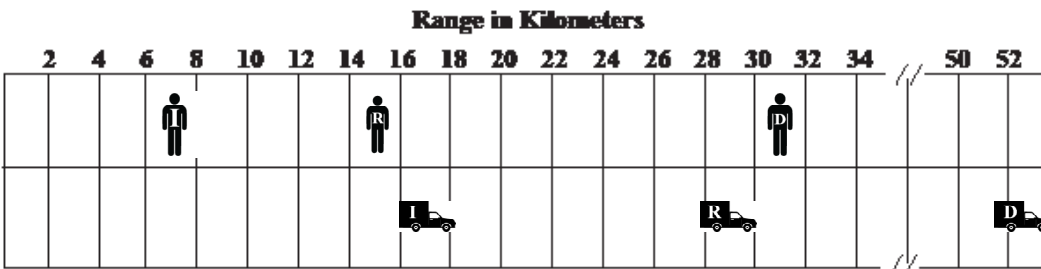
Thermal Camera is the system of choice for long range all-weather security and surveillance. With outstanding target detection and recognition capabilities, the LR- SD combines high end performance with reliability and ease of use. The LR- SD delivers in day or night an extraordinarily clear thermal video with the convenience of a continuous zoom.

Its horizontal field of view zooms smoothly from 12.5° to 0.7°. It enables man-sized target detection at ranges in excess of 25km in good conditions. The LR- SD integrates advanced cooled photodetector technology has a 640 x 512 that operates in the 3–5µm MWIR spectral region — the best choice for marine and high humidity environments. Environmentally sealed, dry nitrogen backfilled enclosure ensures operability and stability over variable temperatures and diverse weather conditions. The LR- SD imager is remotely controllable via serial interface and Graphical User Interface.

Applications: Vessel Traffic Surveillance, Border Protection, Critical Infrastructure Protection, Airport and Port Security

*Range Performance

- D = Detection** 50% Probability D / R / I
- R = Recognition** Target 2 degree delta T vs background
- I = Identification** Clear atmosphere / very low turbulence
Actual range performance will vary based on a number of conditions, including user experience, display size/quality, weather/atmospheric conditions, etc.



- = Target Size (1.8x0.5m)
- = Target Size (2.3x2.3m)

Long Range SD Thermal Imaging Camera

Featuring:

- 18x Continuous Optical Zoom
- Auto Focus
- f/4 High Sensitivity Zoom Lens
- Cooled 3–5µm MWIR Detector
- 640 x 512 pixels Focal Plane Array
- Multiple Command Protocols
- 2 Year warranty
- Environmentally Sealed IP67
- G5 Image Processing
- Edge Enhancement
- Optional Local Area Contrast Enhancement
- SD SDI Digital Video Output
- Adaptive temporal noise reduction
- Digital Zoom up to 8x
- Optional Turbulence Mitigation
- Optional IP video and control (H.264)
- Optional Electronic Image Stabilization

MWIR Long Range 18x SD Thermal Camera

Part	200107
Video	PAL/NTSC/SD-SDI, IP (optional)
Control	Control and command available via RS-232/422 serial interface, IP (optional)
Power	6-32 VDC/ 20 Watts typical @ 25°C
Environmental	Unit sealed and dry nitrogen backfilled, rated IP67 Front Element Defroster Operating Temperature Range: -32°C to +65°C Meets MIL STD 810F
Mount	1/4-20 or 3/8-16 Tripod Interface
Weight	29.7 lbs (13.5 kg)
Length	25.4 in (64.5 cm)

Cooled Sensor

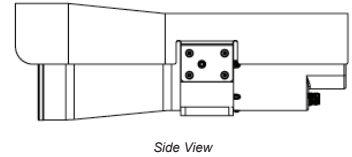
Detector	640 x 512
Spectral Band	3–5µm
Warranty	2 -Years

Zoom Lens

Spectral Range	3-5µm
Lens Type	f/4 18x Continuous Zoom
Lens Features	Motorized remote operation Auto and manual focus adjust 18x Continuous Optical Zoom
Field of View	NFOV - 0.7° x .5° WFOV -12.5° x 9.5°

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MWIR Long Range-HD 18X Zoom Thermal Camera



Side View



Rear View

The LR-HD Continuous Zoom Thermal Camera is the system of choice for long range all-weather security and surveillance. With outstanding target detection and recognition capabilities, the LR-HD combines high-end performance with reliability and ease of use.

The LR-HD delivers in day or night an extraordinarily clear thermal video with the convenience of continuous zoom from 16.6° to 0.9°. It enables man-sized target detection at ranges in excess of 25km in good conditions. The LR-HD integrates advanced cooled photodetector technology has a 1280 x 1024 focal plane array and operates in the 3–5μm MWIR spectral region — the best choice for marine and high humidity environments. Environmentally sealed, dry nitrogen backfilled enclosure ensures operability and stability over variable temperatures and diverse weather conditions. The LR-HD imager is remotely controllable via serial interface and Graphical User Interface.

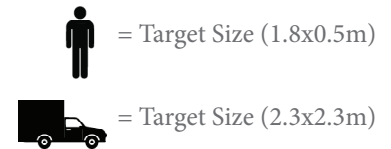
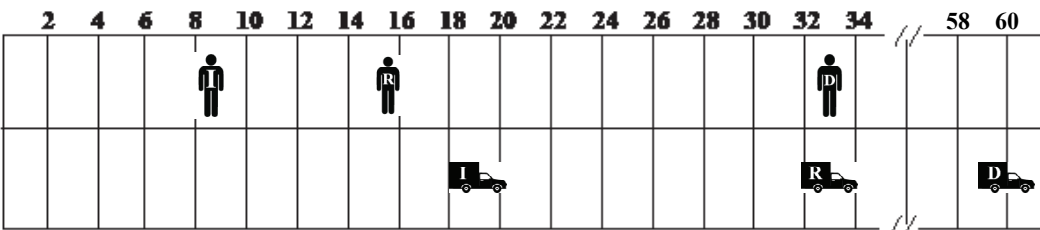
Applications: Vessel Traffic Surveillance, Border Protection, Critical Infrastructure Protection, Airport and Port Security



*Range Performance

- D = Detection** 50% Probability D / R / I
- R = Recognition** Target 2 degree delta T vs background
- I = Identification** Clear atmosphere / very low turbulence
Actual range performance will vary based on a number of conditions, including user experience, display size/quality, weather/atmospheric conditions, etc.

Range in Kilometers



Long Range HD Thermal Imaging Camera

Featuring:

- 18x Continuous Optical Zoom
- Auto Focus
- f/4 High Sensitivity Zoom Lens
- Cooled 3–5μ MWIR Detector
- 1280 x 1024 pixel Focal Plane Array
- Multiple Command Protocols
- 2 Year warranty
- Environmentally Sealed IP67
- G5 Image Processing
- Edge Enhancement
- Optional Local Area Contrast Enhancement
- HD SDI Digital Video Output Adaptive temporal noise reduction
- Digital Zoom up to 8x
- Optional Turbulence Mitigation Optional
- IP video and control (H.264) Optional
- Electronic Image stabilization

MWIR Long Range 18x HD Thermal Camera

Part	200124
Video	HD-SDI, IP (optional)
Control	Control and command available via RS-232/422
Power	6-32 VDC/20 Watts typical @25C
Environmental	Unit sealed and dry nitrogen backfilled, rated IP67 Front Element Defroster Operating Temperature Range -32°C to +65°C Meets MIL STD 810F
Mount	1/4-20 or 3/8 -16 Tripod Interface
Weight	29.7 lbs (13.5 kg)
Length	25.4 in (64.5 cm)

Cooled Sensor

Detector	1280 x 1024
Spectral Band	3–5μm
Warranty	2 -Years

Zoom Lens

Spectral Range	3-5μm
Lens Type	f/4 18x Continuous Zoom
Lens Features	Motorized remote operation Auto and manual focus adjust 18x Continuous Optical Zoom
Field of View	NFOV- 0.9° x 0.7° WFOV- 16.6° x 13.3°

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