

IR Imaging Cameras

Product Catalog

RP Optical Lab

Based on its superb in-house optical lens design capabilities and wide variety of IR optics, RP provides complete thermal imaging systems solutions both cooled & uncooled. Serving defence, homeland security and industrial markets, with various surveillance ranges reaching 40km.





**RUGGEDIZED
FOR HARSH
ENVIRONMENTS**



AUTO FOCUS



**ADVANCED IMAGE
PROCESSING**



**FULLY AUTOMATIC
OPERATION MODE**



**CONTINUOUS ZOOM
WITH PRESET
POSITIONS**

Cooled & Uncooled IR-Based Thermal Imagers

- Border Surveillance
- Vehicle Platforms
- Infrastructure Security



Cameras for LWIR 8-14 μ

LWIR 8-14 μ waveband cameras are equipped with continuous/ stepped zoom/ monofocal optics and an uncooled VOx microbolometer, 1024x768x17 μ or 640x480x17 μ pitch focal plane array sensor

KEY FEATURES

- Open frame or IP sealed configurations available
- Internal shutter/ Automatic NUC
- Analog or Digital outputs
- Shock and Vibrations Per MIL-STD-810E

1. ORCHID: CONTINUOUS ZOOM CAMERA WITH 640X480X17 μ SENSOR

*(PLEASE CONSULT RP FOR XGA RESOLUTION)

Focal Length (mm), F#	15 - 100 F/1.4	25 - 145 F/1.4	25- 225 F/1.5
H FOV Wide x Narrow	40° x 6.2°	25° x 4.3°	25° x 2.7°

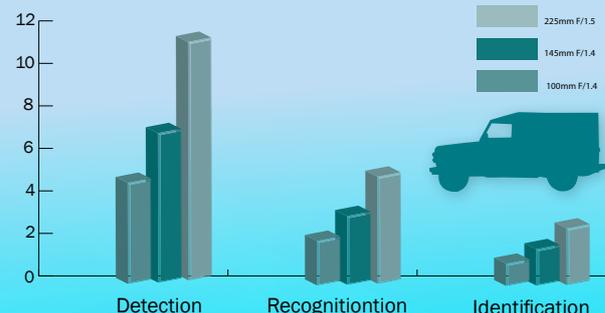
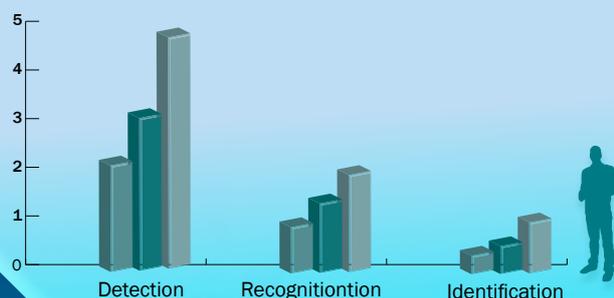
2. OAK: DUAL FOV CAMERA WITH 640X480X17 μ SENSOR

Focal Length (mm), F#	22/66 F/1.25	33/99 F/1.25	45/135 F/1.1-1.6	70/220 F/1.1-1.45
H FOV Wide x Narrow	27.8° x 9.5°	18.7° x 6.3°	13.8° x 4.6°	9° x 2.83°

3. TULIP: SINGLE FOV CAMERA WITH 640X480X17 μ SENSOR

Focal Length (mm), F#	19 F/0.9 Athermal	35 F/1.2 Athermal	75 F/1.2 Motorized	90 F/1.4 Manual
FOV (HxV)	32° x 26°	17.8° x 13°	8.3 x 6.2°	6.9° x 5.2°

*COOLED LWIR systems are also available.





Cameras for MWIR SD/HD 3-5 μ

LRC3Z is a Medium Wave infra-red continuous zoom high performance cooled thermal imaging camera. Designed for long range surveillance and tracking in stationary or mobile systems, land or maritime applications.

A modular design enables using different FL zoom optics reaching 1400mm in Narrow HFOV.

Available both in Standard Definition (SD) 640*512*15 μ or High Definition (HD) 1280*1024x15 μ .

SD 640*512

F/4 lens options

Focal Length (mm)	15 - 330	25 - 460	30 - 600	36 - 725	38 - 825
H FOV Wide x Narrow	35.4° x 1.6°	21.7° x 1.2°	18.2° x 0.9°	15.2° x 0.77°	14.4° x 0.65°

F/5.5 lens options

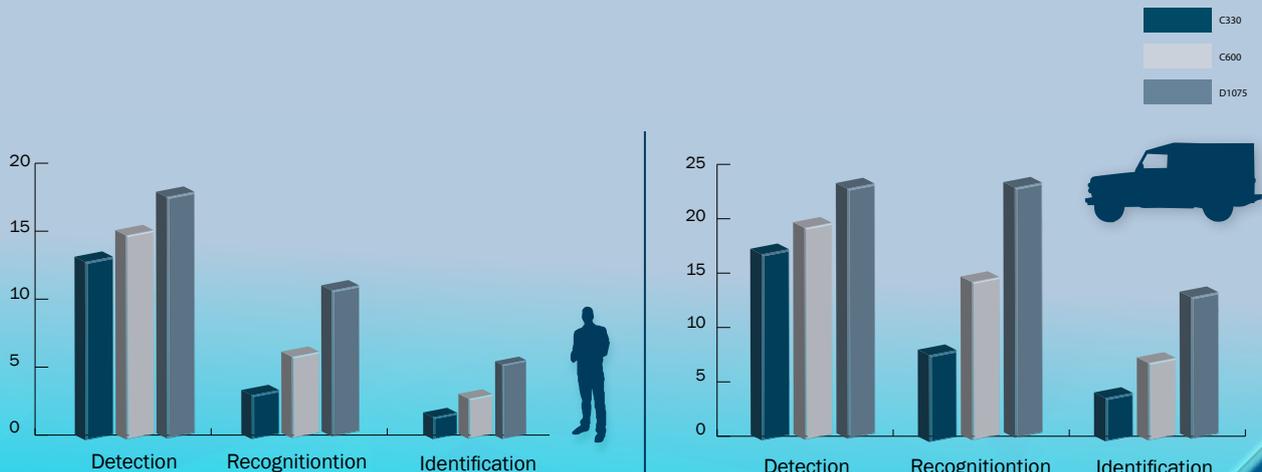
Focal Length (mm)	18 - 435	36 - 870	45 - 1075	60 - 1415
H FOV Wide x Narrow	29.8° x 1.3°	15.2° x 0.63°	12.2° x 0.5°	9.2° x 0.4°

HD 1280*1024

Focal Length (mm)	30 - 400 F/3-4	With multiple BE configurations, reaching 1,200mm in Narrow FOV
H FOV Wide x Narrow	35.5° x 2.8°	
Focal Length (mm)	20 - 490 F/4.7	
H FOV Wide x Narrow	51° x 2.3°	

KEY FEATURES:

- Continuous zoom
- Automatic & Manual focus
- Long life cooler with MTBF > 20,000 hrs
- Unique zoom module with zero optical artifacts
- Optical NUC & 1 command "1 point NUC"
- Image enhancement including local DRC
- Remote controlled
- Dry Nitrogen Backfilled
- Ruggedized construction
- Digital output option with Camera link interface



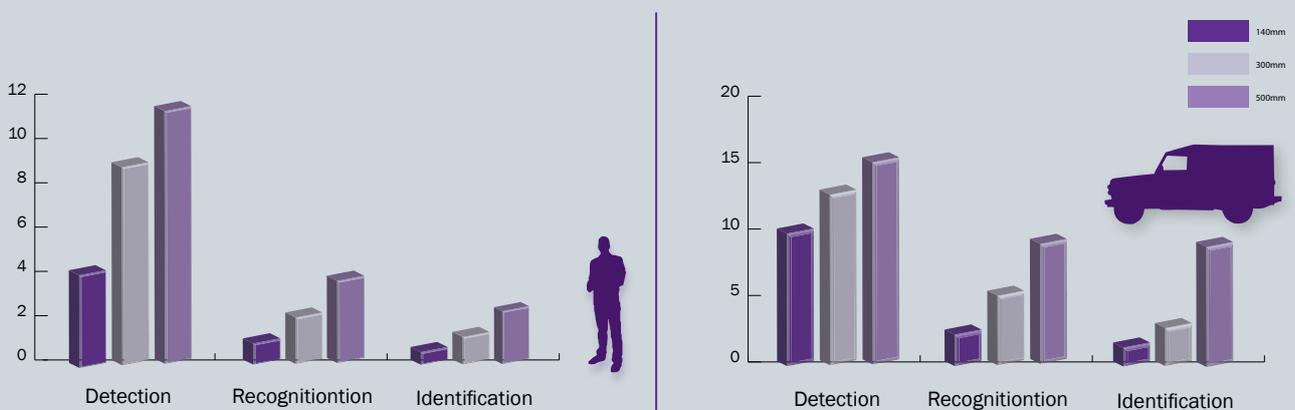


Cameras for SWIR

MAGNOLIA is a modular SWIR system offering superb surveillance performance. It is equipped with a high resolution, 640x512x15 μ pitch focal plane array. Operating in the 0.4/0.9-1.9 μ spectral band.

MAGNOLIA provides superior images in low light level conditions, through smoke, haze, silicon at various distances. The camera is offered with a variety of optics, from athermalized mono-focals to market leading continuous zooms.

Focal Length (mm)	14	20 - 140	30 - 300	50 - 500
Horizontal FOV Wide x Narrow	39.9°	27.6° x 3.9°	18.2° x 1.8°	15° x 1.46°



System Integration

RP integrates its thermal imagers alongside additional EO modules, such as Daylight camera and LRF on Pan/Tilt units - offering a range of turnkey full Multi-Sensor systems at top of the line performance levels.

Several options are available for Day camera, LRF and Pan/Tilt. Each main system component is picked in accordance to the user's needs.



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