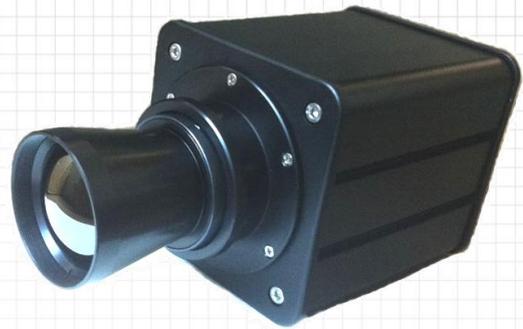


--- LWIR Single FOV Lens

TULIP

LWIR Ruggedized Thermal system
With 19A / 35A / 50A / 75A / 100A / 75 /
130 mm / 210mm lens



Technical Specification

TULIP is a single FOV, long wave uncooled thermal imager offering superb surveillance solutions delivered in a ruggedized package and it is equipped with a high resolution, VOx microbolometer, 640x480 pixels, 17 μ m pitch focal plane array.

Operating in the 8-14 μ m spectral region TULIP provides superior thermal images through smoke, aerosols, and other atmospheric obscurants at long distances.

The rugged enclosure is backfilled with dry nitrogen and environmentally sealed, eliminating the need for additional enclosures.

The RS-232/422 remote control capability permits ease of integration into any client-based security system.

RP Optical Lab provides leading-edge IR equipment to the security and surveillance sector. RP's proprietary optical designs, state-of-the-art laboratories, ensure maximum performance and dependability.

SYSTEM MAIN FEATURES:

- Motorized focus/zoom or A-thermalized lenses configuration
- Auto & Manual focus
- Internal shutter NUC
- Remote control Capability
- Digital output – Camera link
- Dry Nitrogen Backfilled
- Ruggedized construction



SYSTEM SPECIFICATIONS

PARAMETER	VALUE	NOTES								
SYSTEM										
Video Format	NTSC or PAL									
Communication Protocol	RS-422/232 Full Duplex	A-thermal systems: RS232								
Power Requirements	14 - 32 VDC, 1.0A regulated	Average nominal power								
ENVIRONMENTAL										
Operating / Storage Temp	-32°C to +55°C / -40°C to +70°C									
Shock and Vibrations	Per MIL-STD-810E/F									
Sealing	As per IP65	IP66/IP67 available on request								
Controls	Fully Remote controlled	A-thermal lenses do not include motors.								
Electronic Zoom	X2 / X4									
Focus control	Manual / Automatic	A-thermal lenses: no focus is required.								
SENSOR										
Detector FPA	640 x 480 pixels, 17 µm pitch (384 x 288 pixels, 25 µm pitch available on request)	See ordering information below								
Sensitivity	< 50mK	32mK sensitivity is available on request (H)								
OPTICAL										
Focal Length / F#	19F/0.9 A-thermal	35F/1.2 A-thermal	50F/1.4 A-thermal	75F/1.4 A-thermal	100F/1.4 A-thermal	130F/1.2 Motorized	150F/1.4 Motorized	210F/1.5 Motorized		
FOV (HxV)	640x480 x 17µ	32° x 26°	17.8x13°	12.4x9.3°	8.3 x 6.2°	6.2 x 4.7°	8.3 x 6.2°	4.8 x 3.6°	4.2 x 3.1°	3.0 x 2.2°
	384x288 x 25µ	28x21.5°	15.7x12°	11x8.3°	7.3 x 5.5°	5.5 x 4.1°	7.3 x 5.5°	4.2 x 3.2°	3.7 x 2.8°	2.6 x 2.0°
Spectral range	8 - 14 µm									
Focus / Zoom mechanism	A-thermal - No focus required					Motorized, remotely controlled				
NUC	Available – by internal shutter remotely controlled									
Focus Range	15m - ∞	25m - ∞	35m - ∞	55m - ∞	15m - ∞	20m - ∞		30m - ∞		
	No motor exist: focus is fixed at factory					Motorized focus - controlled by user				
Total Weight	3.2 Kg (Nominal)					4.2 Kg (Nominal)				
External Dimensions	Approx.: 150mm (W) x 150mm (H) x 250mm L – consult RP for final dimensions.									
Mechanical Interface	Please refer to MICD (Customized interfacing, available on request)									

ORDERING INFORMATION

TULIP XXX – Y - Z

XXX – Camera Type		Y – Video Format		Z – Lens Focal Length / F#	
640	640 x 480 x 17µm	P	PAL	19A	19mm F/0.9 A-thermal
384	384 x 288 x 25µm	N	NTSC	35A	35 mm F/1.2 A-thermal
640H	640 x 480 x 17µm 32mK sensitivity			50 A	50 mm F/1.2 A-thermal
				75	75 mm F/1.2
				75A	75 mm F/1.4 A-thermal
				100A	100 mm F/1.4 A-thermal
				130	130 mm F/1.2
				150	150mm F/1.4
				210	210 mm F/1.5

