

MWIR Continuous zoom

LRC3Z

MWIR Continuous zoom Long range
Cooled Thermal imaging camera



Technical Specification

LRC³Z is a continuous zoom, high performance thermal camera designed for long range surveillance and tracking in mobile systems or field installations, delivered in a ruggedized package and it is equipped with a high resolution, InSb, 640x512 pixels, 15 μ m pitch focal plane array operating in the 3-5 μ m waveband

The camera provides few continuous zoom lenses alternative both for F/4 as well as F/5.5 detector:

- F/4 alternatives: 15-330mm / 20-300mm / 30-660mm / 40-600mm / 36-725mm or 40-825mm
- F/5.5 alternatives: 18-430mm / 25-600mm / 36-860mm or 45-1075mm

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
- Continuous zoom
- Auto & Manual focus
- Focus maintained while zooming
- Unique zoom module with zero optical artifacts
- Optical NUC & 1 command "1 point NUC Calibration"
- Image enhancement including local DRC
- Remote control Capability
- Dry Nitrogen Backfilled
- Ruggedized construction
- Digital output option - Camera link



SYSTEM SPECIFICATIONS

PARAMETER	VALUE	NOTES
SYSTEM		
Video Format	NTSC or PAL	
Communication Protocol	RS-232/RS-422 Full Duplex	Baud rate 115,200 (other rates available)
Power Requirements	14 – 32VDC, 35W	Average nominal power
Controls	Fully Remote controlled	
Electronic Zoom	X2 / X4	
Focus control	Manual / Automatic	
Total Weight	C725, C825, D1075: ~14 Kg C660, D860: ~ 11.5Kg / C330, D430: ~10Kg	
External Dimensions (Ø x L)	C725, C825, D1075: ø230x460 mm C660, D860: ø220x430 mm / C330, D430: ø220x400 mm	
Mount / Mechanical Interface	Please refer to Mechanical ICD	Customized interfacing - available
Operating / Storage Temp	-32°C to +65°C / -40°C to +71°C	
Shock and Vibrations	Per MIL-STD-810E	
Sealing	As per IP65	IP66/IP67 available on request
SENSOR		
Detector FPA	640x512 pixels, 15 um pitch	See ordering information below
Sensitivity	< 25mK	Please consult for better sensitivity
OPTICAL		ORDERING INFORMATION
F#	F/4 or F/5.5	NAME-X-Y
Spectral Range	3 – 5 µm	
FOV (Deg.)	15 – 330 mm	Wide FOV: 35.4°(H) x 27.0° (V) Narrow FOV: 1.67° (H) x 1.33° (V)
ODEM (base lens)	30 – 660 mm	Wide FOV: 18.2°(H) x 14.6° (V) Narrow FOV: 0.9° (H) x 0.7° (V)
	36 – 725 mm	Wide FOV: 15.2°(H) x 12.2° (V) Narrow FOV: 0.77° (H) x 0.61° (V)
DIAMOND (base lens)	40 – 825 mm	Wide FOV: 14.4°(H) x 11.5° (V) Narrow FOV: 0.65° (H) x 0.5° (V)
	18 – 430 mm	Wide FOV: 29.8°(H) x 24° (V) Narrow FOV: 1.3° (H) x 1° (V)
	25 – 600 mm	Wide FOV: 21°(H) x 17°(V) Narrow FOV: 0.95° (H) x 0.75° (V)
	36 – 860 mm	Wide FOV: 15.2°(H) x 12.2° (V) Narrow FOV: 0.57° (H) x 0.46° (V)
GALAXY Based (Folded configuration)	45 – 1075 mm	Wide FOV: 12.2°(H) x 9.75° (V) Narrow FOV: 0.5° (H) x 0.4° (V)
	20-300mm	Wide FOV: 27°(H) x 21.6° (V) Narrow FOV: 1.83° (H) x 1.46° (V)
	40-600mm	Wide FOV: 13.5°(H) x 10.8° (V) Narrow FOV: 0.92° (H) x 0.73° (V)
Focus / Zoom mechanism	Motorized, remotely controlled	
		"X" - Video Output
		P N
		PAL NTSC
		"Y" - Optics
		D430
		D600
		D860
		D1075
		C330
		C660
		C725
		C825
		G300
		G600
		Continuous 18 – 430 F/5.5
		Continuous 25 – 600 F/5.5
		Continuous 36 – 860 F/5.5
		Continuous 45 – 1075 F/5.5
		Continuous 15 – 330 F/4
		Continuous 30 – 660 F/4
		Continuous 36 – 725 F/4
		Continuous 40 – 825 F/4
		Continuous 20 – 300 F/4
		Continuous 40 – 600 F/4

