

LWIR mono-focal for 17u detectors – commercial off the shelf lens

RP-9014M

LWIR 90 mm F/1.4 mono-focal
Lens for High 640 x 480 x 17u detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Very High performances lens
- Cost effective high quality lens

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#	90mm F/1.4	Nominal values.
Detector (FPA) type / size	640 x 480 x 17 microns 384 x 288 x 25 microns	
FOV (degrees)	6.9° (H) x 5.2° (V) 6.1° (H) x 4.6° (V)	For detector size of 640 x 480 x 17μ and detector size of 384 x 288 x 25 x 15μ
Optical Coatings		
	All internal surfaces	High efficiency AR coating
	Front surface	High durability AR coating
Optical Total lens track	120 mm	From front vertex of front element to FPA
Optical Back Focal Length	Approx 23 mm	

MECHANICAL

Mechanical Back Focal Length	19.2mm (standard mount)	Other mounts to comply with different detectors are possible – Please consult RP.
Focus mechanism	Manual	Optional: Motorized – model RP-9014MT
Focus indication position	Included	For motorized model: Thru encoder of motor and opto-switch.
Total Weight	~ 300 grams	Preliminary Value
Structure	Sealed lens.	Motorized model: open frame with front element sealed to front flange of lens.
External Dimensions	72.5 mm diameter x 125mm Length (Please refer to MICD for details)	

ELECTRICAL (For Motorized model RP-9014MT)

Power Input	12VDC, 0.3 A	Nominal
Communication Protocol	RS-422/232 Full Duplex	Default is RS422; Baud rate 19,200, n, 8, 1

ENVIRONMENTAL

Operating/Storage Temperature	-30 °C to +65°C / -40°C to +70°C	
Shock and Vibrations	Per applicable standard	
Lens sealing lever	IP65	Applicable for Manual model
Front lens sealing	IP67	Applicable for motorized model

