

AA07L

Athermal Ge Lens

Technical Data



JIANGSU ASCENDENT OPTRONICS INC.

Module		AA07L	Detect	Identify	Verify
Focus Length		7mm			
F number		F1.0			
Lens mounting		M25*0.5			
Adapter core		384x288 shutter			
FOV (H×V)	17μm384×288	52.1 °×39.4 °	206m	51m	26m
Lenses Material		High pure Ge Mono crystal	The above data according to the Johnson criterion calculation (1.5 pixels for detection , 6 pixels for identification,12 pixels for verification, the probability is 50%, the contrast of target and background is 1). The target size is calculated based on the critical size of the human(0.75 meters). The actual range will be affected by other factors such as attenuation vary, different climatic conditions, the thermal sensitivity of the detector pixel, noise, image algorithm, target background difference.		
Operating Wave length (μm)		8 ~ 14			
Distortion		< 0.7%			
Optical athermalization		Yes			
Central MTF		0.72 @20 line to/mm			
Coating transmissivity		96%			
Focusing		Athermal Fixed			
Intercept		9mm			
Operating temperature		-40°C ~ +60°C			
Weight		27.5g (No lens cover)			
Max diameter		Φ23mm			
Length		26.5mm			
Aperture		Fixed circular aperture			



