

# SF35L2 Ge Lens Technical Data



Suzhou Grand Sensor Inc.

Module	SF35L2		Detect	Identify	Verify
Focus Length	35mm				
F number	F1.2				
Lens mounting	M25*0.5				
Lenses back distance range	13 ~ 19.22mm ( with lock				
Idoneity of detector diagonal	≤14mm				
FOV (H×V)	17μm384×288	10.7 °×8.0 °	1029m	257m	129m
	25μm384×288	15.6 °×11.7 °	700m	175m	88m
	17μm640×480	17.7 °×13.3 °	1029m	257m	129m
Lenses Structure	2G (spherical*2)		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 car( 2.3 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.		
Lenses Material	High pure Ge Mono crystal				
Operating Wave length (μm)	8 ~ 14				
Distortion	< 0.7%				
Central MTF	0.7 @20 line to/mm				
Marginal MTF	0.5 @20 line to/mm				
Lens coating	AR				
Coating transmissivity	96%				
Bets imaging range	1m ~ ∞				
Focusing	Fixed				
Intercept	14.5mm				
Exposed parts waterproof	Yes				
Operating temperature	-40°C ~ +60°C				
Weight	40g (No lens cover)				
Max diameter	Φ36mm				
Length	25.4mm				
Aperture	Fixed circular aperture				
Standard accessories	Front & Back cover				

