장파장 적외선 열화상 카메라





보안용 카메라



384X288 해상도
640x480 해상도
1024x768 해상도

온도측정용 카메라 및 네트워크 카메라

384x288 해상도
640x480 해상도

렌즈 & 게르마늄 보호 필터

4.8mm/5mm/8mm/12mm/20mm/35mm/50mm/75mm 렌즈
100mm 부터 250mm 까지, 수동 또는 모터구동 초점 렌즈
Zoom 렌즈
접사렌즈





관련 제품

Housing(보호 필터 장착)



열화상 카메라 _ 온도측정용

	CG320	CG640
Resolution	384x288	640x480
Pixel Pitch	17μm	
Detector Type	LWIR, Uncooled a-Si Microbolometer	
Thermal Sensitivity of Detector(NETD)	<40mK @f/1.0, 30Hz, 300K	<50mK @f/1.0, 30Hz, 300K
F number of lens	F1.0(To keep total thermal sensitivity of camera at good level, COX cameras are with f1.0 lenses for most of cases)	
Spectral Range	8 - 14 μm	
Color Variation(Palette)	8 COLORS (GREY, IRON, RAINBOW, GREY RED, YELLOW, MID GREY, FIRE, BLUERED)	
Radiometric Type	Fully radiometric for all pixels	
Measurement Range	Normal temp. detection mode: -20~120°C High temp. detection mode: 0~650°C **메디컬 모드: 20~50℃ (온도 정확도 : ±1°C)**	
Accuracy	±2°C or 2% at 30°C of ambient Temperature	
Image Setting	AGC, Noise Filter, Noise Strength, Edge Filter, Edge Strenght, NUC, Mirror, Flip, Invert, Image Filter on Screen Menu	
Zoom	2x & 4x Digital Zoom	
focus	Manual, Motorized, Athermalized	
Lens	4.8/12/20/35/50/75/100/110/130/150/200/210/250mm lens manual/motorized focus, zoom Athermalized/Macro lens available	
Control of focus/zoom	Include circuit for controlling lens motors for focusing and zooming respectively. Software(Thermal analyzer) has icons for focusing "+"/"-" and zooming "+"/"-".	
TV Mode	NTSC/PAL Compatible	
Temperature data output	via Ethernet port(Giga E)	
Video frame Rate	BNC connector(composite): NTSC 30Hz, PAL 25Hz HDMI: Selectable(50Hz or 60 Hz)	
OSD menu control	Pelco-D(RS485)	
Ethernet	Giga Ethernet(10/100/1000Mbps)	
Start-up	<20 Seconds	
Modular Type	Possible after close discssion	
PC Software	Included in the package(Thermal imaging analyzer/Camera controller/Thermal report)	
Dimensions(L.W.H)	92 x 62 x 58 mm	
Input Voltage	110 to 220V AC(DC 12V)	
Operating Temperature	-10°C to 60°C	
Storage Temperature	-40°C to 70°C	
Power Consumption	12 VDC : 5W	
Weight	Approx. 290g(without lens)	Approx. 310g(without lens)
Application	온도측정 , 저장, 분석 및 알람. 체온 측정(메르스), PCB 점검, 화재감시, 생산현장 감시. * Software, SDK 제공 (렌즈모터 제어 , Zooming 기능, 이벤트 알람기능)	

렌즈별 화각 및 측정면적

1. MODEL : CG300/CG320/CG320-IP

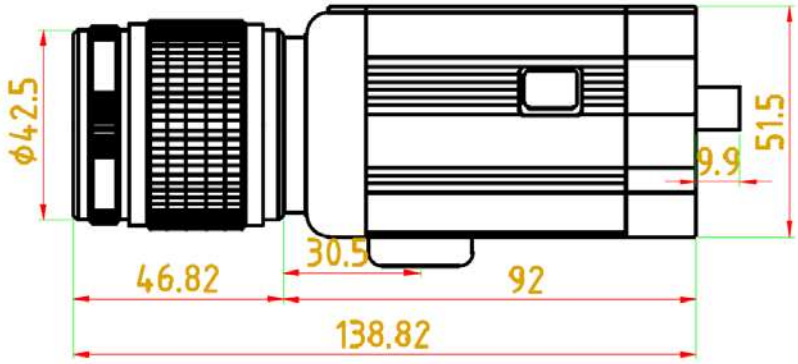
렌즈종류 (mm)	측정거리 (M)	화각 HFOV VFOV	사람인지 6pixel 12pixel	거리별 측정 면적 (가로*세로) (* 렌즈 f=1.0 기준)									
				1M	2M	5M	10M	50M	100M	500M	1KM	1.5KM	2KM
4.8	0.5~	68.43	45M	1.36	2.7	6.8	13.6	68.0	136.0				
		54.04	22M	1.02	2.0	5.1	10.2	5.1	102.0				
8	0.5~	44.39	74M	0.82	1.6	4.1	8.2	41.0	82.0				
		34.03	37M	0.61	1.2	3.1	6.1	30.5	61.0				
12	0.25~	30.43	112M	0.54	1.1	2.7	5.4	27.0	54.0				
		23.06	56M	0.41	0.8	2.1	4.1	20.5	41.0				
20	0.3~	18.54	186M	0.33	0.7	1.7	3.3	16.5	33.0	165.0			
		13.96	93M	0.24	0.5	1.2	2.4	12.0	24.0	120.0			
35	0.5~	10.66	325M		0.4	0.9	1.9	9.3	18.5	92.5	185.0		
		8	163M		0.3	0.7	1.4	7.0	14.0	70.0	140.0		
50	1.5~	7.47	465M		0.3	0.7	1.3	6.5	13.0	65.0	130.0		
		5.61	233M		0.2	0.5	1.0	5.0	10.0	50.0	100.0		
75	5~	4.98	698M			0.4	0.9	4.4	8.8	44.0	88.0	132.0	
		3.74	349M			0.3	0.7	3.3	6.6	33.0	66.0	99.0	
100	5~	3.74	930M				0.7	3.3	6.5	32.5	65.0	97.5	130.0
		2.8	465M				0.5	2.5	4.9	24.5	49.0	73.5	98.0
110	10~	3.4	1,023M				0.6	3.0	5.9	29.5	59.0	88.5	118.0
		2.55	512M				0.5	2.3	4.5	22.5	45.0	67.5	90.0
130	10~	2.88	1,209M				0.5	2.5	5.0	25.0	50.0	75.0	100.0
		2.16	605M				0.4	1.9	3.8	19.0	38.0	57.0	76.0
150	15~	2.49	1,395M				0.4	2.2	4.4	22.0	44.0	66.0	88.0
		1.87	698M				0.3	1.7	3.3	16.5	33.0	49.5	66.0

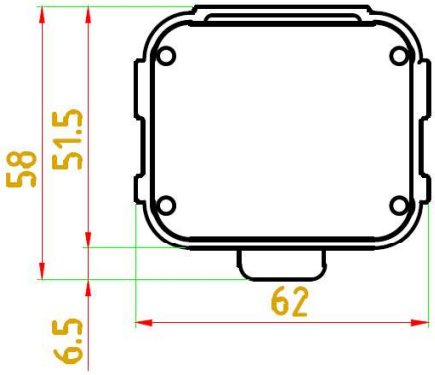
2. MODEL : CG600/CG640/CG640-IP

렌즈종류 (mm)	측정거리 (M)	화각 HFOV VFOV	사람인지 6pixel 12pixel	거리별 측정 면적 (가로*세로) (* 렌즈 f=1.0 기준)									
				1M	2M	5M	10M	50M	100M	500M	1KM	1.5KM	2KM
4.8	0.5~	97.15	45M	2.27	4.5	11.4	22.7	113.5	227.0				
		80.73	22M	1.7	3.4	8.5	17.0	8.5	170.0				
8	0.5~	68.43	74M	1.36	2.7	6.8	13.6	68.0	136.0				
		54.04	37M	1.02	2.0	5.1	10.2	51.0	102.0				
12	0.25~	48.77	112M	0.91	1.8	4.6	9.1	45.5	91.0				
		37.56	56M	0.67	1.3	3.4	6.7	33.5	67.0				
20	0.3~	30.43	186M	0.54	1.1	2.7	5.4	27.0	54.0	270.0			
		23.06	93M	0.41	0.8	2.1	4.1	20.5	41.0	205.0			
35	0.5~	17.67	326M		0.6	1.6	3.1	15.5	31.0	155.0	310.0		
		13.3	163M		0.5	1.2	2.4	11.8	23.5	117.5	235.0		
50	1.5~	12.42	465M		0.4	1.1	2.2	11.0	22.0	110.0	220.0		
		9.33	233M		0.3	0.8	1.7	8.3	16.5	82.5	165.0		
75	5~	8.3	698M			0.7	1.5	7.3	14.6	73.0	146.0	219.0	
		6.23	349M			0.5	1.1	5.4	10.8	54.0	108.0	162.0	
100	5~	6.23	931M				1.1	5.5	10.9	54.5	109.0	163.5	218.0
		4.67	465M				0.8	4.1	8.2	41.0	82.0	123.0	164.0
110	10~	5.66	1,023M				1.0	5.0	9.9	49.5	99.0	148.5	198.0
		4.25	512M				0.7	3.7	7.4	37.0	74.0	111.0	148.0
130	10~	4.79	1,209M				0.8	4.2	8.4	42.0	84.0	126.0	168.0
		3.6	605M				0.6	3.2	6.3	31.5	63.0	94.5	126.0
150	15~	4.15	1,395M				0.7	3.7	7.3	36.5	73.0	109.5	146.0
		3.12	698M				0.5	2.7	5.4	27.0	54.0	81.0	108.0

열화상 도면

1. CG300/CG320/CG600/CG640 (20mm렌즈)





2. IP모델 및 Motorized Lens (20mm 모터구동렌즈)

